

Thursday, 12th November 2009

1

2 (Morning session)

3 (9.30 am)

4

JOANNE TIERNEY, sworn

5

Examined by MISS CARMICHAEL

6

THE CHAIRMAN: Your full names, please.

7

A. Joanne Tierney.

8

THE CHAIRMAN: Take a seat, please.

9

MISS CARMICHAEL: Good morning. It's Mrs Tierney, isn't it?

10

A. Yes.

11

Q. I think you have provided a statement and a

12

supplementary statement to the Inquiry?

13

A. That's right.

14

Q. Subject to any perhaps differences between the two which

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we might discuss, in which case I would assume the later

16

would be your preferred account of events?

17

A. Yes. The supplementary statement was just in relation

18

to clarify my dealings with the Crown Office about the

19

non-numeric joint report.

20

Q. I will have to ask you, as I have had to ask a lot of

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witnesses, to bring the microphone closer because it can

22

be very difficult for people at the back of the hall to

23

hear if we don't have it almost uncomfortably close.

24

Perhaps subject to that and to anything else you say

25

in your oral evidence today are you happy to adopt your

1 statements as your evidence?

2 A. Yes, I am.

3 Q. You are currently the Fingerprint Unit Manager for SPSA
4 Forensic Services in Edinburgh?

5 A. That's correct.

6 Q. I wonder if you could tell the Chairman a little bit
7 about what that involves on a day-to-day level?

8 A. With responsibility for the Unit Manager, I'm
9 responsible for the Fingerprint Department for SPSA
10 Forensic Services Edinburgh. It's a smaller department
11 with a team of eight experts, and we process all the
12 fingerprint cases that are transmitted through Lothian
13 & Borders Police and for the Lothian & Borders Police
14 region.

15 Q. What does your role as manager involve? Are you simply
16 managing others or are you engaged in fingerprint
17 comparison yourself on a day-to-day level?

18 A. I wouldn't routinely be engaged in fingerprint
19 comparison on a day-to-day level although I do aim to
20 process a couple of cases regularly just in order to
21 keep my expertise up as well as being competency tested
22 but my role is mainly strategic. It's mainly to look at
23 the business objectives to agree those business
24 objectives with the local head of operations and to
25 agree how we're going to improve our service delivery

1 reduce turnaround times, et cetera. That kind of
2 strategic responsibility is what my main focus is,
3 performance measurement.

4 Q. When you say you process a couple of cases yourself does
5 that mean you might come to be cited for court in
6 relation to those cases?

7 A. Yes, I could well be, yes.

8 Q. You are also involved in a body called the Scientific
9 Advisory Group and I think we will come to see the
10 acronym SAG for that in some documents?

11 A. Yes.

12 Q. Please tell the Chairman what that is.

13 A. The Scientific Advisory Groups, they were set up when we
14 moved over to the SPSA Forensic Services organisation
15 and they were set up at the behest of the director,
16 Mr Tom Nelson. There's one for fingerprints, there's
17 one for DNA, there's one for Scene Examiners and the
18 idea of it is that it's a collective of the technical
19 practitioners within those fields who get together from
20 each of the locations and agree process improvements,
21 agree technological developments, things that are
22 happening current within that field.

23 The fingerprint one is slightly different from the
24 others in that it comprises the unit managers, so it
25 consists of the unit managers from Edinburgh, Aberdeen,

1 Dundee and Glasgow and when I returned from maternity
2 leave in January Tom Nelson asked me to take over the
3 role as Chair. Prior to that it had been John McGregor,
4 the Unit Manager of Aberdeen.

5 What we were focused on at the moment is looking at
6 the quality standards and looking at how to best prepare
7 ourselves for the transition to 17025. One of the
8 directives from Tom Nelson is that he wants generic
9 standard operating procedures for fingerprints across
10 the four bureaux, so at the moment we are agreeing
11 processes, et cetera, and at our last meeting, the
12 meeting on 9th September, I prepared a plan for
13 Mr Nelson about how we would work towards the ISO 17025
14 accreditation for fingerprints.

15 Q. I will ask you a little bit more in due course about
16 17025 but for the record and for those who may not know
17 what it is just at this stage could you outline what you
18 mean by 17025.

19 A. I'm not a quality professional. I'm not a quality
20 manager. My role in terms of the 17025 accreditation is
21 to agree the content of the standard operating
22 procedures but as far as I understand it at present when
23 we worked with the Scottish Fingerprint Service we were
24 accredited to ISO 9001, which is a international quality
25 standard to manage your systems and on transfer to the

1 SPSA, Forensic Services, it was decided at executive
2 level that we would move to ISO 17025 accreditation to
3 which departments of the current laboratories are
4 accredited and it's a much more proscriptive standard
5 than the 9001. So we will be looking at our processes
6 and procedures and seeing how they will fit with that
7 standard but we'll be doing that with the quality
8 managers who are trained and qualified in the
9 application of that standard. My role in it is just to
10 agree what's best practice for fingerprint processes.

11 Q. I would like to move at this point to ask you about what
12 you tell us about in your supplementary statement, the
13 one you provided more recently and our reference for
14 that is FI0197.

15 In this statement you are talking about a time when
16 there were discussions going on between the Crown Office
17 and Procurator Fiscal Service -- and I think it would be
18 SFS at the time before SPSA came into existence -- about
19 the format of joint reports and statements in the run-up
20 to the non-numeric standard being introduced in
21 Scotland.

22 A. Mm-hm.

23 Q. You tell us in your supplementary statement, if we can
24 look at paragraph 3, about a time in August 2004 when
25 you attended a meeting with Mr Innes of the Fingerprint

1 Service and with Mr Gilchrist of Crown Office. You had
2 been asked to prepare a style of report for that
3 meeting.

4 We can take that down. You tell us at paragraph 4
5 that you prepared a style report and the reference we
6 have for that, as we see in your statement, is MM0145.

7 I would like just to take a moment to look at that
8 document please and it should come up on screen for you,
9 Mrs Tierney.

10 We see on the front of this "Draft 1", submitted to
11 Mr Gilchrist and we have a date of 6/8/04. Is that a
12 note you made yourself?

13 A. Yes, that's --

14 Q. Sorry, is that a note that you made in 2004 or is that a
15 note you have added as an aide-memoire at this stage?

16 A. No, it was a note I made at the time.

17 Q. I wonder if we can perhaps scroll through to the next
18 page. What we see here is the style report that you had
19 in mind back in 2004?

20 A. Mm-hm.

21 Q. We see here that we have, I suppose, a formal part about
22 the authorisation of fingerprint experts and about the
23 receipt of certain items. Then we have a note which
24 tells us a little bit more about friction skin and how
25 impressions might be made, would that be fair, under the

1 note section?

2 A. Yes.

3 Q. Then we have a figure 1 headed, "Composition of lifted
4 impression". In this example what we are seeing by the
5 composition is a conclusion that the mark was made by
6 sweat?

7 A. That's correct.

8 Q. At point 2 what we see is a record in relation to
9 surface and a conclusion on the part of the examiner as
10 to whether what they had been sent is consistent with
11 what they had been told about where the impression came
12 from?

13 A. That's right.

14 Q. Then at point 3 you see something about the development
15 medium?

16 A. That's correct.

17 Q. That is a record about the way that the fingerprint was
18 brought to life in this case with aluminium powder and
19 the examiner is recording that it reveals the expected
20 attributes of aluminium powder. So, again, it's perhaps
21 a check against what the examiner's been told in the
22 paperwork about where it came from. They are checking
23 that against their own impression?

24 A. That's correct, yes.

25 Q. I wonder if we could move on to the next page, please.

1 At point 4 we see a heading, "Detailed analysis".

2 I wonder if you can tell us a little about what is
3 required here and what the purpose of that was.

4 A. The purpose of this report was, as I've stated, that I
5 received a request from Mr Innes to prepare a style of
6 report that might be applicable under a non-numeric
7 standard and prior to the non-numeric standard, we had a
8 numeric standard at which point your report simply
9 stated that you had met the standard in terms of number
10 of characteristics that were required to demonstrate an
11 identification for the court.

12 The thing about moving to the non-numeric was the
13 idea of adopting an approach whereby you looked at all
14 the information available in the lift but also that you
15 were able to talk about all of the information.

16 The headings of clarity, movement, ridge flow and
17 ridge characteristics are adopted from the theory
18 proposed by David Ashbaugh in terms of
19 qualitative/quantitative analysis in his work around
20 that.

21 Clarity is about what you can see in the mark lifted
22 from the crime scene and that will vary depending on the
23 circumstances in which the mark was lifted. It's your
24 first thing you look at whenever you are making an
25 examination of a fingerprint mark because the clarity

1 will decide whether you can actually move forward with
2 the further examination or not. So that's what clarity
3 is looking for at that point and in this example there
4 was no obvious effect of any contamination or surface
5 interruption and that the impression revealed suitable
6 detail to allow further analysis. So that was step one.
7 It was clear enough. We could see something in it and I
8 could then move on to the next stage of the analysis.

9 The next stage of the analysis is movement and
10 that's because of the flexible nature of skin and
11 pressure exerted when the impression is deposited. It
12 can have an effect on the appearance of the ridge in
13 terms of they can be squashed together and the ridges
14 and furrows not so evident and, as fingerprint experts,
15 through experience and training you become accustomed to
16 being able to identify some characteristics of when
17 there's been movement in a print.

18 In this example some movement was evident in the
19 left area of the impression and I could conclude that
20 greater deposition pressure was exerted in this area
21 when the impression was deposited. So that's just
22 giving a bit more information about what we read from
23 the way the appearance of the mark is on the lift.

24 Then the final point, 4.3, is ridge flow and
25 characteristics and this is moving into what you would

1 examine as the basis for starting your comparison
2 purposes but this is still at the analysis stage.
3 You're looking to see what does the ridge flow tell me?
4 Does it reveal a pattern? Does it reveal anything?
5 What sequence are the ridge characteristics in? What
6 sequence in order and relationship do they have to each
7 other and what will I then use as the basis for moving
8 on to the comparison stage?

9 Q. So broadly speaking what we are seeing here is we have
10 heard about the ACE-V process from other witnesses. Are
11 we seeing here a record of the A part of that?

12 A. Yes, that's what that is. That a record of the analysis
13 stage and those would be some of the things that you
14 would consider at analysis stage.

15 Q. But there would never have been, would I be right in
16 saying, any proposal to have a record of characteristics
17 actually observed at the analysis stage in the form of a
18 report of this sort?

19 A. No. It's to say that you look at the ridge flow and
20 does the ridge flow tell you anything? Yes, you can see
21 a pattern. You wouldn't be, certainly at that stage,
22 saying, you know, I've seen this characteristic then two
23 intervening ridges, then another characteristic. You
24 wouldn't be peeling out that pattern at that moment but
25 there might be something about the characteristics in a

1 particular mark that would be worthy of note that you
2 might record at the analysis stage.

3 Q. You then move on to what I think is a fairly brief and
4 formal record of the comparison, which really comes to a
5 record of the conclusion on the comparison; would that
6 be fair?

7 A. Yes.

8 Q. And a further conclusion that the impression
9 was identical with a particular known print at point 6?

10 A. That's right.

11 Q. If you can perhaps take that down, I think I would
12 perhaps summarise your statement fairly if I say there
13 were perhaps a number of long versions of the report,
14 perhaps similar to that but with refinements then
15 circulated within SPSC, that particular version having
16 left with the Crown Office. Would that be correct?

17 A. Yes. That was a draft that I did that for Mr Innes and
18 then gave to him prior to attending that meeting.

19 Mr Innes then came back to me and asked me to get two
20 operational experts in Glasgow who were involved in a
21 specific case to fill it in for that case so that it was
22 an actual example in relation to a case. They did that
23 which obviously somewhat lengthened the draft report and
24 that then, at that time I was informed by Mr Innes that
25 that had been left via Mr Gilchrist with the

1 Lord Advocate for approval.

2 In 2005 I then, as part of a non-numeric training
3 plan for the staff, was circulating a non-numeric staff
4 information pack and Mr Innes asked me to include in
5 that copies of this version of a joint report, version
6 of a non-numeric joint report, and asked the staff to
7 give feedback back to the Head of Bureau about their
8 opinion of it and that's what happened with that report
9 and that was in February 2005.

10 Q. I would like to stop you there to clarify one point. If
11 we can look again at FI0197, which was your
12 supplementary statement, Mrs Tierney, page 1 on to
13 page 2, please.

14 What you are telling us in paragraph 5 I think is
15 about this exercise that you have just described with
16 the operational experts giving rise to a further draft.
17 What you tell us in your statement is that you're unable
18 to confirm who had sight of the document after you
19 submitted it to Mr Innes and, if I have understood what
20 you have just said in evidence correctly, you say you
21 were informed by Mr Innes that that second draft had
22 gone to Mr Gilchrist as well. I just want to clarify.

23 A. No, the first draft had gone, the blank one, if you
24 will. I'm not sure who he sent the completed one to.

25 Q. Thank you for clarifying that. I may have picked you up

1 wrongly, in which case I apologise.

2 You then moved on to tell us about working
3 internally in 2005 and I interrupted you, I think, at
4 that point, sorry.

5 A. In February 2005 this copy of this version style of
6 report was circulated to the staff as part of
7 non-numeric information pack and feedback was received
8 by the heads of bureaux. In August 2005 I was asked by
9 Mr Innes to chair a meeting of the unit managers or the
10 then heads of bureaux and the bureaux trainers to
11 discuss this style of joint report.

12 Prior to that meeting I had a conversation with him
13 and he had said that -- he suggested to me that the
14 requirement was going to be for standardisation of the
15 report format and that that was the priority as opposed
16 to the level of detail that was in the report.

17 When we had the meeting with the heads of bureaux
18 and the bureaux trainers, the feedback about the
19 detailed style of report was, in the main, negative from
20 the staff. It wasn't popular and they felt that there
21 was information in it that was more than was necessary.

22 The instruction I had from Mr Innes was to get
23 agreement to a style of report that the heads of bureaux
24 would be willing to implement in their bureaux that the
25 staff would be happy to use. That was the purpose of

1 the meeting in August 2005 and we agreed a format at the
2 end of that.

3 My role at the time was a training manager role. I
4 had no operational authority within the departments and
5 I was almost, if you will, acting as a conduit in terms
6 of making recommendations about what a report could look
7 like but I had no authority for implementation of that.

8 Q. Would we understand rightly then that it came to be
9 there was a shorter form of report on which there was
10 consensus among the, at the time, heads of bureaux
11 within the Fingerprint Service?

12 A. That's correct, yes.

13 Q. What I would like to ask you about particularly is what
14 you say at paragraph 11 of your statement on page 3
15 because if we've understood rightly so far, there's been
16 a longer form report left in Crown Office hands and then
17 discussions within SFS which have given rise to
18 consensus on a shorter form of your report.

19 What you say at paragraph 11, if we can highlight
20 that so we can see it more easily, is that you had
21 informed Mr Innes and Mr McLean of the outcomes of the
22 August meeting, discussed the agreed format,
23 highlighting differences between that and what had been
24 submitted to the Crown Office in August 2004. You say
25 that you were informed there had been no positive

1 feedback from Crown Office and Procurator Fiscal Service
2 regarding the August 2004-version and at the time you
3 understood this to mean the version had not been
4 accepted, therefore rejected. I am wondering on what
5 material you reached the conclusion that there had been
6 an active rejection by Crown Office?

7 A. That was my understanding of it at the time because when
8 I went to Mr Innes and Mr McLean saying this is what the
9 heads of bureaux have agreed but is significantly
10 different from the August 2004, I was informed by
11 Mr McLean and Mr Innes that the priority was consistency
12 as opposed to the level of detail and that there had
13 been no positive feedback from the Crown Office about
14 the August 2004-version, therefore they weren't
15 accepting it and that was my understanding.

16 Q. If I can just try to unpick that a little bit further,
17 where you aware whether there had been any feedback from
18 Crown Office about the August 2004-version?

19 A. No, I wouldn't have been involved in the feedback. That
20 would be at Mr Innes or Mr McLean's level. That's just
21 what I was informed by them at the time.

22 Q. Did they give you to understand there had actually been
23 negative feedback?

24 A. No, they just said that there had been no positive
25 feedback about the report.

1 Q. So might it be that there had simply been an absence of
2 feedback altogether rather than feedback that was
3 adverse in some way?

4 A. Yes, it could have been that, yes.

5 Q. Moving on a little but still on the theme of the
6 discussions that were going on with Crown Office, should
7 we understand as well that in addition to trying to
8 agree a form of joint report and discussions with Crown
9 Office about that, there were also discussions going on
10 about a national statement format?

11 A. Yes. In 2005 I was asked by Mr McLean to liaise with Mr
12 Liam Murphy of the Crown Office regarding the
13 incorporation of a national standard statement. The
14 August 2004-version had a witness CV attached to it
15 which outlined qualifications and experience and
16 training in relation to your fingerprint career by way
17 of more information about the witness and then I was
18 asked by Mr McLean to liaise with Liam Murphy because he
19 had received some feedback, well, so he told me he had
20 received some feedback saying they wanted that CV-type
21 document incorporated into a national statement format.

22 Q. I think we can perhaps see an example of a standard form
23 statement in the form that it came to be, if we look at
24 MM0134. If we can perhaps put up the next page next to
25 that as well, please.

1 So what we have here is a section for formal
2 information, internal references, disclosable address,
3 name and age and so on in section 1. We have a
4 section 2 for when the statement is taken or compiled.

5 Is it ever the case that anybody other than the SPSA
6 officer him or herself prepares a statement of this
7 sort? And I mean to keep this distinct from any process
8 of precognition?

9 A. No. This would always be compiled by the Fingerprint
10 Examiner who did the joint report.

11 Q. So, in a sense, the provenance fields are perhaps
12 surplus to requirements?

13 A. To be honest, we don't complete them. We complete
14 page 2 but that was the national standard statement
15 format and so it went together as a package as directed.

16 Q. We see section 3 and at the bottom of the first page
17 there, "Free text". What follows from that is some text
18 which appears to have in black what would perhaps be
19 standard form and then some areas in green where there
20 will obviously be variations among the different
21 statements in different cases.

22 Apart from the areas we see indicated in green in
23 this particular copy, are there any other areas of the
24 text that come to be altered from case to case?

25 A. No.

1 Q. There has been at least some suggestion that this might
2 be a document that a Fingerprint Examiner could use to
3 make disclosure to the Crown of any particular matters
4 of interest or concern or matters that might ultimately
5 have to be disclosed by the Crown to the defence in a
6 criminal case.

7 Is that a use for this form that you are familiar
8 with?

9 A. No, it's not something that has been discussed with
10 myself, no.

11 Q. So can I take it that when there were discussions
12 ongoing about the national statement format you didn't
13 understand that there was any suggestion that this
14 particular document should be used in that way?

15 A. That wasn't put to me at the time, no.

16 THE CHAIRMAN: For whom was this document designed then?

17 A. As I say, I was asked by Mr McLean, who was the Director
18 of SCRO at the time, to liaise with Mr Liam Murphy of
19 the Crown Office and we communicated by e-mail. I sent
20 him -- he sent me copies of the national statement
21 format and at that time he was agreeing -- he was doing
22 some work with I think it was with labs. He said he was
23 agreeing a forensic science protocol. It's in one of
24 the e-mails in the additional information I submitted.

25 THE CHAIRMAN: I can understand the background as to why you

1 were asked to do it but this form, when completed by an
2 examiner, to whom did you envisage the completed form in
3 each case going?

4 A. Sorry. It goes with the joint report and it's sent to
5 the Fiscal along with the book of evidence, the joint
6 report and this witness statement.

7 THE CHAIRMAN: So what the Fiscal does after that is a
8 matter for the Fiscal?

9 A. Yes. We send it out as a package. When we receive a
10 statement request from the Crown Office or the Local
11 Fiscal this is completed, a joint report is completed, a
12 book of evidence compiled and then it is returned to the
13 Fiscals' Office as a package.

14 MISS CARMICHAEL: Thank you, sir.

15 There's also been, I think, some suggestion that the
16 joint report might be a means whereby disclosure of
17 particular matters that might at the end of the day come
18 to assist the defence might be made, in the first
19 instance, to the Fiscal when you send in the package.

20 Is that a use for a joint report that you are
21 familiar with?

22 A. It's not -- again, it's not something that's been
23 suggested to me. Obviously, it would make sense but in
24 terms of how the joint report was designed at this time,
25 and this was back in -- we got agreement to it I think

1 in 2006. It was a template format so that basically
2 because the priority was consistency any Fingerprint
3 Expert would simply come along to this template, enter
4 their own personal details in the witness format and
5 their own details about what they had specifically done
6 in that case and that the text was to remain constant
7 and consistent.

8 Now, there was also an annex to the joint report
9 that was agreed with the Crown Office, which included
10 information about all of the other marks because the
11 main body of the report deals with those identified to
12 the accused and the rest of the case material, the
13 outcomes of those examinations are included in the
14 annex.

15 In terms of the move towards disclosure of late I've
16 had no further dialogue with the Crown Office or with
17 SPSA about the content of the joint report and possible
18 uses for it under disclosure.

19 Q. Just moving on, you started to tell us about the annex
20 to the joint report.

21 A. Yes.

22 Q. I think we should perhaps look, I think there's a final
23 page we should look at here for completeness of 134
24 before we leave it and, again, what we see there is some
25 further formal information, personal details and perhaps

1 holiday dates.

2 Section 6, any other confidential material, what
3 does that get used for?

4 A. That doesn't get completed.

5 Q. It doesn't?

6 A. No.

7 Q. We can perhaps take that document away, Mrs Tierney, and
8 look at again FI0197 at page 3. If we look at
9 paragraph 13, you tell us there about a meeting at Crown
10 Office in July 2006. This was arising from Mr Mulhern's
11 immediate priority of getting the non-numeric standard
12 into operation and I think we have learned it came into
13 operation on 4th September 2006?

14 A. That's correct.

15 Q. Again trying to take this fairly shortly, please,
16 correct me if I am wrong but would I be right in saying
17 that the discussions that took place between the time of
18 this meeting in July 2006 and the introduction of the
19 non-numeric standard in September 2006 focused on the
20 way in which the material which now comes in the
21 appendix to the joint report would be handled.

22 A. Yes. What happened was after -- in February of 2006 I
23 had submitted the national statement format and the copy
24 of the joint report, then I'd e-mailed the national
25 statement format to Mr Murphy. It was after dialogue in

1 November, I was off sick for some time and then sent it
2 to him in February and he said that he would get back to
3 us. Now he don't get back to me but he may well have
4 got back to Mr Innes or to Mr McLean and then when
5 Mr Mulhern published his action plan the Action Plan
6 Implementation Team asked me to assist them with some
7 technical information about some stakeholder information
8 to go out to stakeholders as part of the communication
9 plan.

10 Because I had had some dialogue with Mr Murphy about
11 the national statement format by e-mail, they asked me
12 to then come along to this meeting to discuss the
13 non-numeric standard and there were some discussions, I
14 think, at that meeting around communication and how
15 people would be informed about it and also the joint
16 report.

17 Now, at that time bearing in mind that I had been
18 instructed by Mr Innes that priority and consistency --
19 the priority for the non-numeric report was consistency
20 and standardisation across the three bureaux -- or
21 across four bureaux. At that time three of the four
22 bureaux had been accustomed to telling their fiscal in
23 their local version of the joint report all information
24 about all of the material in the case.

25 The Glasgow Bureau had up to that point only

1 included in the joint report information specifically
2 relating to the marks identified to the accused and all
3 of the other case material had not been included in the
4 report.

5 In the pursuit of consistency, three of the bureaux
6 wanted to continue their practice of revealing all of
7 the information to the joint report because the position
8 of those heads of bureaux was that that's what their
9 local Fiscal expected. So when we came to this meeting
10 in July, this was what was put to the representatives of
11 the Crown Office there, that we had three bureaux who
12 revealed all of the information about the case and one
13 bureau who focused only on the identified marks and,
14 yes, the discussions that I was involved with from that
15 point were about how best to get consistency whilst
16 maintaining the practice.

17 Q. We can perhaps take that down for now and look at
18 CO4109. If you scroll through, please, and continue to
19 scroll through to the next page, if we have this page
20 perhaps with the next one up beside it, please. That is
21 pages 4 and 5 of the pdf.

22 What we see here is the joint report form that came
23 to be agreed and that is currently in use. Would that
24 be correct?

25 A. Yes.

1 Q. If we take those pages down and put the next two pages
2 up, please, what we see on page 6 of this document is
3 part of what forms the joint report relating to an
4 identified mark and then on page 7 we see an appendix
5 which I think came to be the agreed solution, which was
6 something that would be submitted with the report to the
7 Fiscal but not as part of the report.

8 Would that be correct?

9 A. That's correct, yes. The directive from Leanne Cross of
10 the Crown Office was to include the paragraph you see at
11 the bottom of page 6 that says:

12 "Further items were received in relation to this
13 case and details of these items and the results of the
14 fingerprint examinations are separately recorded."

15 Q. Which alerts people to the possibility that there are
16 other matters and then it is for the Crown to disclose,
17 in whatever format it regards as appropriate, the
18 contents of appendix A?

19 A. That's correct, yes.

20 Q. Your involvement with Crown Office continued I think a
21 little beyond the time in September when the non-numeric
22 standard started to be used?

23 A. That's correct.

24 Q. You had a meeting with a Miss Leanne Cross on
25 22nd November 2006?

1 A. That's correct, yes.

2 Q. What was the purpose of the meeting?

3 A. In November 2006 Mr Mulhern had asked me to review any
4 issues that had arisen or may have arisen with the
5 implementation of the joint report and I canvassed
6 opinion from the heads of bureaux. It was fine. There
7 was a couple of issues in the Dundee Bureau about
8 requests for additional information and I then arranged
9 a meeting with Leanne to see if there had been any
10 issues in terms of the Crown response to the use of the
11 non-numeric joint report in order for me to prepare a
12 review report for Mr Mulhern. So we met and discussed
13 the issue that come up at Dundee in terms of a request
14 for additional information and about how we should
15 respond to that in order to facilitate the fact they
16 wanted the information but also the directive that the
17 joint report was to stay in a consistent format and not
18 be altered. So Leanne gave a direction that a
19 supplementary memo could be added to the report with the
20 request and what information had been requested.

21 That was an issue that was easily resolved and then
22 the staff within SFS had raised some questions about
23 what happened to the annex and where it went and were
24 they going to, if they were in the witness box, how
25 would they know if the defence had been given the annex

1 or if they had not been given the annex and I put that
2 question to Leanne and received the response that's in
3 the minutes.

4 Q. I think you kept a note of the meeting.

5 A. I did.

6 Q. I think we have that as MM0153. Can I have the next
7 page up alongside as well. What we see, I think, at
8 points 2 and 3, well in fact points 1, 2 and 3 are all
9 matters that have been raised by one end or the other in
10 Dundee?

11 A. Mm-hm.

12 Q. At point 4 we see the discussion about the annex and
13 what happens to it. I wonder if we could move on
14 because it is actually at a point further on in this
15 minute that I am particularly interested in with you and
16 that is point 5 about precognitions.

17 I wonder if you could tell us how that part of the
18 discussion emerged.

19 A. The discussion around precognitions had initially
20 started around the dialogue about the joint report and
21 about what information to include in the joint report
22 and if there was questions around a more detailed
23 analysis because it was a non-numeric joint report how
24 would we answer those and the feedback from Leanne was
25 that precognitions would be the most appropriate forum

1 for a Fingerprint Expert to initially discuss any
2 peculiarities or anything about the evidence or anything
3 about the particular marks or the identifications in the
4 case, rather than formally recording them in the joint
5 report.

6 So our experience, the staff's experience of
7 precognitions was a bit different than the precognition
8 experience that Leanne was describing because
9 historically precognitions had tended to be more a
10 precognition officer coming to the Bureau and reading
11 through your joint report with you and that was it and
12 not necessarily a two-way discussion about the details
13 of the evidence and what inference could be drawn from
14 the evidence and things like that. That wasn't our
15 experience of it.

16 Leanne's position was that the precognition process
17 was much more of a two-way dialogue thing and that
18 fingerprint experts should be encouraged to seek
19 discussions if they had something particular about the
20 evidence that they wanted to discuss. So, because of
21 that sort of gap in perceptions, we talked around how
22 best to develop this understanding of the precognition
23 process and at that time, because I was training
24 manager, we were due to run some continual professional
25 development events for expert staff in 2007 and we

1 agreed that we would get some Crown Office
2 representation on those CPD programmes to talk about
3 precognitions and what precognitions should be and the
4 purpose of them rather than what our experience to date
5 had been of them.

6 Now, in the event, because of the move to SPSA and
7 various other events that happened, we didn't run the
8 CPD programmes in February and then by the time that
9 they were run in 2008 I was no longer involved in
10 training but, as far as I'm aware, I think there was
11 some physical input on those ones in 2008 but that's
12 what point 5 is around.

13 Q. I think we may be going to hear from the Crown Office
14 witness that Miss Ross delivered some training in 2007.
15 Is that something you have any knowledge of?

16 A. No. October 2007?

17 Q. Yes?

18 A. Oh, in October 2007 I had moved to become Unit Manager
19 of Edinburgh so I wouldn't have been involved in setting
20 that up but it may well have taken place and I wasn't
21 aware of it.

22 Q. Did you yourself ever attend any of this training about
23 what the Crown expectation of precognition is?

24 A. No, not in October 2007, no.

25 Q. At any stage?

1 A. At any stage? I think I attended two days of a CPD
2 course in 2008 just before I went on maternity leave and
3 there was an input from Crown Office representative at
4 Tulliallan.

5 Q. Would that perhaps have been a Mr Almond in about
6 May 2008?

7 A. No. In May 2008 I was on maternity leave. It would
8 have been before then.

9 Q. So it would have been at some other time?

10 A. It may well have taken place, I just wasn't at work at
11 the time.

12 Q. So far as practice in relation to precognition of
13 Fingerprint Examiners during the period between your
14 meeting with Miss Cross at the end of November 2006 and
15 March of this year, are you able to tell us how, if at
16 all, that developed?

17 A. Well, at the time in 2006 I was the Training Manager, I
18 wasn't an operational manager. So in terms of the
19 practice of precognitions I wasn't informed of anything
20 that markedly changed.

21 Now I'm Operational Manager for Edinburgh what I can
22 say is from April 2008 until now we've had one
23 precognition of a member of our team and that was last
24 week. That's all I can say about precognitions.

25 THE CHAIRMAN: So a rare occurrence then?

1 A. In Edinburgh it is. Now when I was an operational
2 expert in Glasgow, I would have been precognosced more
3 often but I stopped being involved operationally in 2002
4 so I wouldn't be able to account for the precognition
5 relationships after that.

6 MISS CARMICHAEL: But certainly from April 2008 until now
7 one member of the Edinburgh team precognosced?

8 A. He was precognosced by phone last week for a High Court
9 case.

10 Q. Still on the theme of communication with the Crown and
11 disclosure, one of the things that you discuss in your
12 statement and I think you were perhaps asked to talk
13 about in your original statement, FI0152, is what level
14 of disclosure might be made about discussions that had
15 gone on within SPSA between experts who had different
16 views.

17 If we go to perhaps paragraphs 35 to 38 of your
18 statement at pages 10 to 11. At paragraph 35 you were
19 asked about two sets of circumstances, the first being
20 where examiners were positively disagreeing about an
21 identification and then another where one examiner has
22 identified and the second is doubtful while not perhaps
23 actively disagreeing.

24 At paragraph 36 you say what would happen in the
25 office. The examiner upholding the identification would

1 be given the opportunity to revisit and then a process
2 which you describe elsewhere in your statement and which
3 I will ask you further about, is that questioned
4 identification, QID, procedure would take place.

5 Then in scenario 2 you say there would be discussion
6 by the two examiners in the first instance and then
7 reference to a facilitated discussion.

8 At paragraph 38 you are asked whether the processes
9 would be disclosed to the Crown and you say they
10 wouldn't automatically be disclosed.

11 I wonder if you could tell us why that is?

12 A. They wouldn't be automatically disclosed. They would be
13 recorded on the case files in terms of the diary page
14 but because the case file documentation doesn't proceed
15 to the Crown, that wouldn't be made available to them.

16 Now, I think that that is something that we would
17 need to enter into more dialogue with the Crown about,
18 would they want that kind of information disclosed to
19 them and what would be the most appropriate way for it
20 to be disclosed to them? But at the moment it wouldn't
21 be automatically disclosed because agreement would be
22 reached and if agreement was reached, then the result
23 would go out and so the fact that there had been a
24 facilitated discussion wouldn't impact on the result
25 because agreement would have been reached and if the

1 agreement wasn't reached, the default position for that
2 result would be to say that the mark was of too poor
3 quality to come to a conclusion on this occasion.

4 Q. What about the situation where there's the QID process?
5 If I have understood correctly from another part of your
6 statement -- you can perhaps clarify whether it is
7 current practice or future practice -- there's a
8 verification panel that a queried mark would go to for,
9 effectively, a final decision.

10 Would that be right?

11 A. Yes, it would be right. What I would say about the QID
12 process or the questioned identification process, one of
13 the recommendations from the international panel of
14 experts that were associated with the action plan was
15 that we had some formalised mechanism for dealing with
16 situations where an identification was questioned by a
17 second verifier and this is questioned in terms of
18 examiner A has made an identification and examiner B is
19 absolutely adamant that there's no way that
20 identification could be upheld. It's not saying, "It
21 could be but I'm not sure". They are saying,
22 absolutely, it's definitely not that person and examiner
23 A and examiner B fail to reach an agreement on that. So
24 examiner A who said it was an identification would get
25 an opportunity to revisit that identification and given

1 an opportunity to say, you know, "I've made an error.
2 Yes, I agree that's not an identification", and then
3 that would be a performance issue to be managed locally.

4 If both experts held to their opinion, the
5 questioned identification process would come into play.
6 Now, this questioned identification process was
7 discussed and agreed and formulated while I was on
8 maternity leave so I wasn't privy to the discussions
9 around that.

10 Now that I am in the role of Chair of the Scientific
11 Advisory Group I've revisited this questioned
12 identification process because, in my opinion, it stops
13 short. What it said was examiner A and examiner B are
14 in deadlock over this result so it's referred to the
15 unit manager and immediately it would leave the bureau
16 and it would go to an assembled panel of experts to
17 review the mark and come to their conclusion and the
18 procedure stated that their conclusion would be
19 accepted.

20 Now, that's where the procedure ended. In my
21 opinion, we have a big piece of work to do and dialogue
22 to have with Crown Office with investigating officers,
23 et cetera, about what would then happen to that
24 identification if the panel said it was an
25 identification but you still had one examiner who

1 disagreed with that, then in my personal opinion the
2 verification process on that is not complete because for
3 identity to be established you must have consistent
4 conclusions from different examiners and you have one
5 examiner who hasn't reached a consistent conclusion on
6 that.

7 It is a difficult area and I think that the
8 procedure that was agreed in my absence stops short and
9 didn't proceed into the discussions I think we need to
10 have about what is the best way to resolve that and I
11 would, you know, we would need to take direction from
12 Mr Nelson around what way he would want that. Would he
13 want that result transmitted? Would he want that result
14 discussed? And I think it would also need to be on a
15 case-by-case basis, dependent on the relevance of the
16 mark to the case. So I think we've got the questioned
17 identification procedure in place, we've got agreement
18 from the unit managers and the staff to that, that there
19 is an acceptance that it would have to be resolved, but
20 what happens after that resolution is a piece of work
21 we've yet to do.

22 THE CHAIRMAN: Just so that I am sure I have it right, in
23 that case when there is deadlock between two examiners,
24 if I can call it deadlock, but disagreement, you don't
25 go to the facilitated discussion stage that you have

1 mentioned in paragraph 38?

2 A. No.

3 THE CHAIRMAN: You go on to this panel. The panel would be,

4 what, from other bureaux or experts from other bureaux

5 or just how is the panel formed?

6 A. That again was not specified in the procedure. Would we

7 construct a panel of three experts from each of the

8 Scottish bureaux? Would we send it to a bureau in

9 England and ask them for their opinion on it? Again,

10 those things have not been formalised in the procedure

11 and I think we've a bit of work to do round the detail

12 for that.

13 THE CHAIRMAN: It is not fair then maybe to ask you the next

14 question: would they sign up, as it were, to the

15 identification, in other words, the experts who have

16 been asked, consulted outside or would it only be the

17 expert within the original bureau who had taken the view

18 that there was a positive identification who would be

19 the witness.

20 A. Who would be the witness?

21 THE CHAIRMAN: Yes.

22 A. Again ...

23 THE CHAIRMAN: Not clear?

24 A. Not clear and I think we've work to do with that. Now,

25 I know that there are discussions within NPIA and the

1 Forensic 21 programme about looking at a kind
2 arbitration panel for England, et cetera, they're
3 wanting something where disputed identifications could
4 be reviewed. The difficulty with it is that you can
5 write procedure but because it's such a rare occurrence
6 it's never had -- it's never enacted so, you know, you
7 can write a procedure and say, yes, we've got a
8 procedure in place but it stops short of what to do if
9 you enacted the procedure. So I think we need to -- we
10 started discussions, again, with the other unit managers
11 about tuning down the fine detail to get that recorded
12 in a formalised procedure because we would need to
13 demonstrate, especially as I understand it for the
14 purposes of 17025, we would need to demonstrate what
15 corrective action would arise out of that circumstance
16 and to date our procedure doesn't demonstrate that.

17 MISS CARMICHAEL: The point is, I suppose, it just hasn't
18 happened yet.

19 A. It just hasn't happened yet, but you know I need the
20 procedure, we need the procedure in place to show that
21 we have a means of dealing with that situation and we
22 have. I mean we've got agreement to the principle of
23 it. We need to tie up the detail.

24 Q. Another matter that has emerged in discussion in the
25 Inquiry so far in relation to disclosure is the example

1 of whether it would be disclosed that an examiner had
2 failed a competency test, whether that was something
3 that the Crown would be made aware of. What's your
4 position on that?

5 A. Well, certainly it wouldn't be the case at the moment
6 that that would be disclosed. The issue of somebody
7 failing a competency test is, in my opinion, a personal
8 performance issue for the unit manager of that
9 department, the same as any other performance issues
10 that might arise with a member of staff and would need
11 to be addressed through their personal development
12 review, through training and through looking at the
13 circumstances of why that person may have failed that
14 competency test on that occasion.

15 You know, it would depend on the circumstances and
16 the nature of why they had failed the competency test.
17 I would say that there would be personal performance
18 measures that I would put in place in my Bureau in terms
19 of review of previous casework, et cetera, but if I
20 satisfied myself that they were competent to perform
21 their job, then I wouldn't see a need to disclose that
22 to the Crown because I am responsible for the competency
23 of my staff and I am prepared to say I'm allowing them
24 to work on live casework; therefore, I would stand over
25 their competency to do the job.

1 Q. My next question may be perhaps a difficult one standing
2 the answer you gave earlier about only one person in
3 your unit being precognosced in the last while.

4 Do you have any insight into how an examiner in
5 precognition would explain to a precognoscer the strong
6 and weak points in relation to the identification that
7 had actually been made?

8 A. Well, I think that the first thing is that you would
9 need to take it on a case-by-case basis and I think it
10 would depend on what information or what inference the
11 Crown or the Procurator Fiscal are trying to draw from
12 your evidence and I think that, you know, as Fingerprint
13 Examiners, our job is to examine the material that comes
14 before us, reach our conclusions in terms of identity,
15 non-identity or it's not possible to state on this
16 occasion and the inference that needs to be drawn from
17 that is up to the Crown to decide.

18 I would be expecting the Crown to come back and say,
19 "Well, you've identified this fingerprint in this
20 location. Would it then suggest that this happened or
21 this was the manner in which it was left". We're not
22 there with those kinds of inferences yet because very
23 much our job is to come to our conclusions on our
24 findings of identity. So in terms of explaining the
25 strengths or weaknesses of a particular case, I don't

1 see that that would be the expert's role to say, "Well,
2 we have got an identification on the murder weapon and
3 we've got an identification on something else. That's
4 the strength in the case". That information is there
5 before the Crown and they can determine the strengths
6 and weaknesses of the fingerprint evidence in relation
7 to the case that they are building.

8 Q. So it would follow from that perhaps that there might be
9 particular areas the Crown would want to explore with
10 you because of their analysis of where the fingerprint
11 evidence fitted into the case?

12 A. Yes.

13 Q. So there might be things about orientation of marks or
14 whether you could draw inferences from the fact that
15 there were particular fingers apparently next to each
16 other or something of that sort that you might be asked
17 about?

18 A. Yes, that would be correct.

19 Q. Thinking about the idea that the Crown will have at some
20 point to disclose to the defence anything that might
21 help the defence case or weaken the Crown case, if one
22 had a situation where one was identifying a fingerprint
23 and there were some areas of the print which were very
24 clear which would provide a lot of information and there
25 were some areas of the mark, I should say, the crime

1 scene mark, that were for some reason difficult to
2 analyse, difficult to understand the characteristics for
3 some reason, I'm wondering how that sort of information
4 might be conveyed to the Crown?

5 A. Well, if there was sufficient information for the expert
6 to have reached their conclusion of identity and that
7 had been examined by further examiners and consistent
8 conclusions had been arrived at, the gray area or
9 distorted area or whatever would have been discounted
10 from their part of the examination and a Fingerprint
11 Expert wouldn't be relying on information in that area
12 in order to come to their conclusion. So it wouldn't be
13 material to the identification, if you see what I mean.

14 Q. Perhaps I could ask you about this in a slightly
15 different context and if I can take you to page 23 of
16 your statement where you talk about the way that
17 Fingerprint Examiners express and reach their
18 conclusions. What you say at paragraph 92 is:

19 "A Fingerprint Expert can claim to be 100 per cent
20 confident in their findings and also be 100 per cent
21 confident that every other expert comparing the
22 impressions in question would come to the same
23 conclusion."

24 But that is all you can say. What we have heard
25 about in the case that the Chairman is dealing with here

1 is a mark where a number of experts looked particularly
2 at the bottom part of a mark and found, to their eye,
3 16 points in sequence and agreement that they were happy
4 with and happy to go to court with. We've heard also
5 that some at least of them discounted the upper part of
6 the mark because it didn't seem to them to yield
7 information. It didn't seem to them to be helpful.
8 Then what happened after that was that other experts, as
9 it happened, from another jurisdiction, although that
10 perhaps doesn't matter, looked at it and said, "Well, we
11 actually can see things in the upper part of the mark
12 and what we can see are differences", and that seems to
13 raise at least the possibility of a scenario where one
14 examiner is quite satisfied on part of the mark, leaving
15 out of account the difficult part, if I can put it that
16 way, of identity but somebody else comes after them and
17 looks at it and comes to a different view on that
18 difficult part of the mark.

19 What I'm wondering is how it could be conveyed to
20 the Crown that there is at least the possibility,
21 because of some difficulty with a part of the mark, that
22 someone else might come in and reach a different
23 conclusion?

24 A. I think that that would need to be recorded at the
25 analysis stage and if you look at the 2004 version of

1 the report it would be included in that kind of dialogue
2 where it said there is an area of the mark that, you
3 know, has movement or substrate distortion in it that
4 I'm not happy to include as part of the examination.
5 But in terms of an identification, what I would suggest
6 is that if the Fingerprint Expert must look at all of
7 the available information in that mark and can't
8 discount a part of it. What I'm talking about is
9 discounting an area where there's nothing to be seen.
10 I'm not saying that you pick the piece of the mark that
11 you like and you don't look at the information in the
12 other part. Then you're not conducting a full and
13 thorough analysis, comparison and evaluation of that
14 mark in its entirety and I wouldn't expect that to
15 happen from a Fingerprint Expert.

16 Q. So should we take it from that that by the time there is
17 any communication with the Crown the Fingerprint
18 Examiner will be confident that, even if there is a
19 difficult area of the mark, no-one else who is going to
20 look at this is going to come to a different view on the
21 conclusion?

22 A. Yes, because there should be consistent findings from
23 all the examiners who have looked at that mark before it
24 even gets to the Crown.

25 Q. I take it from what you say then that when you refer to

1 the consistency from all the examiners you are referring
2 to the verification process?

3 A. Yes.

4 Q. That is where some of the confidence comes from; would
5 that be fair to say?

6 A. Yes.

7 Q. But thinking to the time when you're carrying out -- if
8 you are the first examiner, if I can put it that way,
9 the first examiner, at that stage before your colleagues
10 have looked at it, is the level of confidence in the
11 result effectively the same? You have referred to the
12 idea that a Fingerprint Expert being confident that
13 every other expert comparing the impressions would come
14 to the same conclusion. Is that the way that the first
15 examiner works as well?

16 A. Yes. As a Fingerprint Expert, you will be completely
17 satisfied with the identification before you would put
18 it forward for verification to another expert.

19 Q. I am wondering what happens then to that confidence if
20 the verifier either actively disagrees or perhaps what
21 might be a more straightforward situation says "Well, I
22 don't quite see it" or "I can see one or two parts here
23 but I'm not seeing an identification". What happens to
24 that confidence in that situation?

25 A. For Fingerprint Experts, you're trained and you learn to

1 come to your conclusions and be confident with your
2 conclusions because you're not going to commit to a
3 verification if you have any doubt in your mind. You're
4 not going to commit to an identification if you have a
5 doubt in your mind about what that would be. But,
6 within the Edinburgh Bureau, there's an open exchange
7 where you would be looking at a mark thinking, "Mmm, can
8 I get a start on this, can I not get a start on this, I
9 can see some in common". There would be an exchange
10 between Fingerprint Experts about "What do you think
11 about that?" So there's dialogue at that stage.

12 But when you have committed to an identification and
13 somebody comes back to you and says, "I'm not quite sure
14 about that, I can't quite see that", your first reaction
15 is to then, right, I need to go and look at that again
16 and check and see if I really did get it right in the
17 first place because the basic premise of the training
18 programmes, et cetera, is that the fingerprint
19 identification process -- the purpose of it is to
20 identify people but always to err on the side of caution
21 to protect the innocent, if you will. So that the
22 most disastrous consequence would be to make an
23 identification and it not be that person.

24 So if somebody comes back to you and says, "Joanne,
25 you need to have another look at that", the first thing

1 I would be doing is, right, I need to have another look
2 at that. You know, I'll go right back and start with
3 analysis, comparison, evaluation all over again looking
4 for the differences or the uncertainties that they
5 pointed out to me.

6 Q. Just taking the Edinburgh Bureau, because that's where
7 you are, as an example, how often does that sort of
8 dialogue take place where a verifier comes along to the
9 first examiner and raises a question of that type?

10 A. Very rarely, to be honest.

11 Q. What happens when it does happen?

12 A. When it does happen, there would be a conversation
13 and -- well, in Edinburgh what happens is examiner 1
14 would make their identifications and make their findings
15 and then the verifier would come along and think,
16 "Right, okay I'm happy with impression A1, A2. I'm not
17 great about A3. I'll go and put it on the comparator.
18 I'll have a look at it again. No, I'm still not happy
19 about that".

20 At that stage, he will go back to examiner A and
21 say, "Right, I can't quite see what you've got in that"
22 or whatever. They will have a discussion about it. If
23 they reach agreement, great. If they don't, the mark is
24 recorded as insufficient quality to come to a conclusion
25 at that stage.

1 Q. Can you give us any idea in what proportion of cases
2 they would reach agreement? I mean, would they normally
3 reach agreement or --

4 A. In my experiences working there in 2007 they reached
5 agreement at that stage. Because the examiner A is
6 not -- if the first examiner makes an identification and
7 examiner B says, "I'm not that happy with it", then
8 examiner A is not going to -- they are going to have a
9 dialogue, "Right, can you see it? Can you not see it?
10 Okay, if you still can't see it, that's fine".

11 THE CHAIRMAN: When you say "agreement" it could be
12 agreement either that it is an identification or it's
13 not?

14 A. Yes and they would always -- the phrase that's sort of
15 bandied around is "err on the side of caution". The
16 first examiner would prefer to make it not an ident than
17 to push an ident that someone else is doubtful for.

18 MISS CARMICHAEL: It may be a difficult question and if you
19 can't answer it, please say so, but can you give us any
20 idea of the proportion of discussions in that sort of
21 situation that end up with the identification being
22 agreed?

23 A. I wouldn't be able to answer that but I could find that
24 information out because it's recorded on the diary page
25 that those discussions were had. So, you know, as an

1 exercise, I could go back and review cases and find that
2 information out for you. What I could say is it is a
3 small proportion of cases where these kinds of
4 discussions even occur in the Edinburgh Bureau.

5 THE CHAIRMAN: Just while I remember to ask, is yours a
6 fairly small bureau compared to Glasgow?

7 A. It is. We have a team of eight experts.

8 MISS CARMICHAEL: The reason I am asking if you can answer
9 that is because I think I picked Mr McGinnies's evidence
10 up rightly when he said he couldn't think of an instance
11 where the identification by the first examiner hadn't
12 come to be agreed in that situation where there were
13 discussions.

14 A. I'm sorry?

15 Q. I think we heard some evidence from Mr McGinnies. I
16 asked him a similar series of questions and I think he
17 said that where the first examiner had examined and a
18 query was raised by the second he couldn't think of an
19 instance where the second hadn't, on looking at the
20 matter with the first examiner, come to agree with the
21 first examiner?

22 A. Come to agree the ident?

23 Q. Yes.

24 A. Right. I'm not sure what he based that on. That might
25 be the situation in Glasgow. In Edinburgh there's

1 dialogue about it and agreement is reached but if the
2 second examiner remains doubtful, then the ident will
3 not be put forward as an ident.

4 Q. It may come to be of some assistance to the Inquiry if
5 you would be able to look at records and see what the
6 outcomes are in your own office but obviously that's not
7 something I can ask you to address in the course of your
8 evidence today in any more detail.

9 THE CHAIRMAN: You shouldn't have offered.

10 A. I'm just thinking, my team will be sitting there going
11 what are you doing.

12 MISS CARMICHAEL: Yes, never volunteer.

13 A. Well, you know, we can look at that.

14 Q. We are grateful for the assistance.

15 A. Can I just point out that would be for the Edinburgh
16 Bureau.

17 Q. We understand that, thank you.

18 I would like to ask you about your response to some
19 evidence that we heard on Tuesday of this week from
20 Lord Boyd of Duncansby who was previously the
21 Lord Advocate. This was in the context of thinking
22 about introducing the non-numeric system. He indicated
23 that one concern that he had had under the numeric
24 system was that perhaps evidence that might assist the
25 Crown which was consistent with being an accused's

1 fingerprint but which couldn't be regarded as
2 identification might be missed and also that evidence
3 that might come to assist the defence (for example, if
4 you had a finger-mark on a knife which, while not being
5 able to be matched to an incriminee could be regarded as
6 consistent with that incriminee) was being missed and
7 there had been, I think the Inquiry has seen from older
8 documents, discussion about whether there could be
9 production of results that are consistent with, albeit
10 that the examiner wasn't willing to individualise to a
11 particular known individual.

12 If I understand rightly, under the non-numeric
13 practice there are still three results. There are still
14 individualisation, exclusion or insufficiency of the
15 mark. Would that be right?

16 A. **(Nodded)**

17 Q. What I am wondering is why there is still no other
18 category where you might not be able to individualise to
19 somebody but you would be able to say, and help either
20 the Crown or the defence to some extent by doing so,
21 yes, I can see something and what I can see is
22 consistent with individual X albeit I'm not satisfied
23 that I can individualise. Why do we still not have that
24 forth category?

25 A. Because that is a piece of work that we need to do and

1 I've raised this. In England and Wales they refer to
2 those as unable to excludes or UTEs and they include
3 those in their reports and I have been -- I have only
4 come back to work this year. I was off for a year and
5 when I recently attended the Heads of Bureaux forum down
6 in NPIA, which is all the heads of bureaux from England
7 and Wales, then this use of unable to exclude was much
8 more at the fore and I learnt at that heads of bureaux
9 forum they had included unable to exclude as part of the
10 advance assessment.

11 When I went on maternity leave I was -- when I was
12 Training Manager I was engaged with the National
13 Fingerprint Board, Training and Evaluation Group and we
14 didn't have that UTE phrase as well established as it
15 was now.

16 So that's something that's been brought to my
17 attention at the heads of bureaux forum. I discussed it
18 with the other unit managers at our meeting there in
19 November and we've all agreed that that's a piece of
20 work we need to do up here in Scotland and have dialogue
21 with the Crown about what way they would want that
22 represented and, indeed, have dialogue with
23 investigating officers about what way they would want
24 that represented. But it is a gap in our results and
25 it's something that's on the agenda for the Fingerprint

1 SAG to address, particularly again as we move through to
2 17025 accreditation. But I would accept that that is an
3 area we need to develop.

4 Q. Did you say the Fingerprint SAG?

5 A. Yes, sorry, the Scientific Advisory Group.

6 Q. Has there been any recent dialogue with the Crown on
7 this topic?

8 A. No, I haven't -- I haven't had dialogue with the Crown
9 in relation to any of these issues personally. That's
10 not to say it hasn't taken place but I haven't been
11 involved in it.

12 Q. I would like to move on and ask you about something
13 different now and that is about what you tell us at
14 paragraph 18 of your supplementary statement FI0197 at
15 page 4.

16 I think you have probably been asked at some stage
17 whether there had been any mention of the OIG, the US
18 Department of Justice's report into the Brandon Mayfield
19 affair in your course of your dealings with the Crown
20 and, in particular, whether the Crown received any
21 advice about that in the run-up to the introduction of
22 the non-numeric standard.

23 Can I ask you when you first became aware of the
24 Mayfield case?

25 A. I first became aware of the Mayfield case in my dealings

1 with the Action Plan Implementation Team because I think
2 they had sight of a report, the Mayfield Report, into
3 that.

4 Q. The action plan itself was intimated in the early part
5 of 2006; would that be right?

6 A. Yes, and this would have been -- Superintendant Colin
7 Campbell mentioned it to me early 2007, maybe, when they
8 were moving -- when he was returning he gave me a copy
9 of the report.

10 Q. So were you aware of it in 2006 or not until 2007?

11 A. This is as far as I can recollect, I certainly wasn't
12 aware of the contents of the report at any time I was
13 discussing the non-numeric joint report with the Crown
14 so I wouldn't have been aware of the outcomes of the
15 Mayfield Report at that stage.

16 Q. So in terms of knowing the detailed outcomes and
17 recommendations, should we understand that you became
18 aware of that perhaps in 2007 at some point?

19 A. Yes. Superintendent Campbell left me some papers. When
20 he was transferring back to Strathclyde Police he left
21 me some papers and reports that he had received copies
22 of for my information, just because he'd printed them
23 all out.

24 Q. Given that your discussions with the Crown, I think we
25 have heard your last contact was perhaps the debriefing

1 meeting with Miss Cross in November 2006?

2 A. That's right.

3 Q. That obviously detail that, you personally wouldn't have
4 conveyed to them --

5 A. No.

6 Q. -- in the run-up to the non-numeric standard being
7 brought in.

8 Insofar as you have read the report since it came to
9 your attention, can you tell us in what ways it may have
10 informed any developments in SPSA?

11 A. Well, in terms of informing the developments in SPSA,
12 obviously when I became aware of the report I wasn't
13 in -- I was still in the Training Manager role, which is
14 a recommendation -- I could make recommendations but
15 don't have the executive authority or didn't have the
16 executive authority to implement them. Now I'm back at
17 work and I'm unit manager and chair of the SAG we can
18 look at how we can incorporate some of the
19 recommendations but, again, I wouldn't have the
20 authority to introduce that or implement that kind of
21 change. We would be putting forward recommendation
22 papers to Mr Nelson for him to make a decision on.

23 One of the things that has struck me from the OIG
24 report is this idea of the inconclusive, which is,
25 again, along the lines of unable to exclude type result

1 of a comparison. So I think that's a piece work that we
2 need to do and we need to look at the recommendations
3 about detailing aspects of the analysis phase but those
4 are just my personal recommendations. I would have to
5 get agreement from the unit managers around anything we
6 wanted to do in those areas and put that forward to
7 Mr Nelson for an executive decision.

8 THE CHAIRMAN: I am not sure I picked up your answer
9 properly. You would or would not have the authority to
10 implement a change in your own Bureau?

11 A. No, I wouldn't because the way -- I can implement change
12 in terms of local efficiencies, et cetera, but to
13 introduce a fundamental change to a fingerprint process
14 needs to be done with the agreement of all of the unit
15 managers and then a recommendation paper to Mr Nelson.

16 THE CHAIRMAN: I wasn't quite sure whether you said would or
17 would not and that is all I wanted to clarify.

18 MISS CARMICHAEL: I am conscious of the time.

19 THE CHAIRMAN: What we do is we usually stop, because we
20 start so early at 9.30, even when we started at 10.00 we
21 stopped at 20 minutes at 11.00 so we will interrupt your
22 evidence now until 11.20.

23 **(11.00 am)**

24 **(A short break)**

25 **(11.20 am)**

1 MISS CARMICHAEL: We'd started to speak a little about
2 the Brandon Mayfield Report just before the break.

3 In the context of the SAG, the role of the SAG, if I
4 understand it, is to provide recommendations and advice
5 to Mr Nelson although he has the authority to take these
6 forward or not as he sees fit.

7 A. That's correct.

8 Q. What discussion of the Mayfield Report has there been in
9 the SAG?

10 A. We haven't had any detailed discussion about the
11 Mayfield Report.

12 Q. I am going to move to a slightly different topic which I
13 think will probably bring us back to certain aspects of
14 the Mayfield Report, including one you touched on
15 yourself just before the break.

16 I would like to ask you, as I have asked a number of
17 other people, just to describe to the Chairman in your
18 own words the process that you would go through if you
19 were examining a mark in the first instance, leaving
20 aside for the moment if you came to it as a verifier but
21 what you would do in your own practice, in analysis,
22 comparison and evaluation?

23 A. Okay. When you receive a fingerprint lift or a
24 photograph of a fingerprint lift the first thing you do
25 is you look at the lift to see how many finger

1 impressions are on it and you would determine how many
2 finger impressions were on that lift. There may be one,
3 there may be two or three or whatever. You would give
4 each of those a unique identifier. So, for example, if
5 it was a lift that the scene examiner had called lift A
6 you would then determine that there were four or five
7 impressions on that lift A and you would then number
8 those A1, A2, A3, A4, A5 and mark those on some form of
9 examination record. We have a fingerprint examination
10 record.

11 Then you would look at each of those finger
12 impressions or finger-marks in more detail and the
13 purpose of that would be to look and see what clarity
14 and what level of detail were in each of those marks and
15 to determine if they were suitable for further
16 examination.

17 Now, at that stage what I would be looking for is
18 I'd be looking to see if the lift was noted as having
19 been taken from a window. You would expect to see --
20 you wouldn't expect to see wood grain or anything like
21 that in the background of the lift and so you would be
22 looking to see if what's evident in the background is
23 consistent with what the examiner has noted of where he
24 found the article. If he's noted that the article was
25 curved or flat, et cetera, you would be looking to see

1 if there was any evidence of that in the lift.

2 Then you would turn your attention to the actual
3 marks themselves and you'd look to see if there was any
4 discernible ridge flow or pattern in the finger-marks.

5 So you would see if there was a whorl or a loop or an
6 arch or a tented arch, if any of that was visible, and
7 then you would look in more detail to see what kind of
8 characteristics were in the mark and whether they were
9 of sufficient quality and quantity to enable you to
10 ultimately come to a conclusion on that mark if you had
11 something to compare it against.

12 So you would be looking for sequences of
13 characteristics and sequences that are clusters of
14 characteristics that you would then use as information
15 with which to begin for comparison purposes and you
16 would also be looking to see if there was any other kind
17 of level of detail evident in the mark and that's what
18 you would do as part of the analysis phase, and whether
19 there was anything that is affecting the order and
20 relationship of those characteristics such as movement
21 or pressure or anything like that.

22 Once you'd satisfied yourself that either the mark
23 was suitable for further examination or the quality and
24 the quantity of the detail available in the mark was not
25 of sufficient standard to enable you to do something

1 further, you would then record that on your fingerprint
2 examination record and move on to the next stage, which
3 would be then the comparison stage.

4 Q. Just taking that perhaps bit by bit, you talked about
5 looking for sequences of characteristics.

6 A. Yes.

7 Q. We have heard other witnesses use expressions like
8 target groups or something that catches my eye. Are we
9 talking about the same sorts of things here?

10 A. Yes, you would be looking to see if there was an evident
11 sequence of characteristics there in sufficient quality
12 and quantity that would allow you then to move on to the
13 comparison stage.

14 Q. Do you take any notes or drawings as to what sequences
15 of characteristics that have caught your eye at that
16 stage are?

17 A. No, not at this point. Trainee Fingerprint Officers
18 would, as part of their training, they would complete
19 the analysis sheets but Fingerprint Experts wouldn't.
20 That would be a mental process they would be going
21 through.

22 Q. So when you're talking about making a note you would
23 simply be making a note that there was, in your view,
24 sufficient quality and quantity to move on rather than
25 making a note of what those characteristics were?

1 A. Yes.

2 Q. Or we have heard what I think some people have described
3 as maybe a purist view that you might even go the length
4 of noting all the characteristics you could actually see
5 on the crime scene mark in some way before moving on.
6 You don't do anything of that character?

7 A. No.

8 Q. So when you come to the comparison phase then please
9 describe again in your own words what you do.

10 A. Well, the comparison phase is taking the information
11 that you can see in the mark and seeing if it's
12 replicated in a known fingerprint. Comparisons can be
13 denoted as either manual comparisons or onscreen
14 computer-based comparisons.

15 If there has been suspects or elimination details
16 submitted with the case material you would compare
17 your -- you would carry out your manual comparisons in
18 the first instance, generally, because in the Edinburgh
19 Bureau we have a clerical assistant who would package up
20 all the forms and submit them to you.

21 What you would do is you would look at the mark.
22 You would see if it was possible to determine what digit
23 had left the mark, whether there was anything in it that
24 suggested it was a particular finger and then you would
25 take your known prints, which would be your ten-print

1 form, and you would begin the comparison process.

2 Now, how I carry out that comparison process is I
3 look in the mark. I determine on a cluster of
4 characteristics and I then look at a corresponding area
5 in the fingerprint form to see if that particular
6 cluster and sequence is replicated. Having established
7 that it either is or isn't, I then go back to the mark
8 and count from that cluster to another characteristic or
9 another couple of characteristics, then return to the
10 known print and count from the cluster to another
11 characteristic or another couple of characteristics and
12 continue working my way through the print, through the
13 mark, looking at corresponding areas in the print until
14 I'm satisfied that identity is established or not
15 established.

16 Q. What equipment do you use?

17 A. I use a fingerprint eyeglass.

18 Q. Do you use one eyeglass or do you use two?

19 A. I use one eyeglass.

20 Q. How does that work, given that you have got two images
21 to look at, one mark and one print, how do you do it
22 physically with one glass?

23 A. Well, in the RUC or PSNI where I was trained it was
24 custom and practice to use one eyeglass, which was not
25 the small square eyeglasses, it was a slightly bigger

1 one and you would fold the photograph of the lifted
2 impression you always got a photograph or a couple of
3 photographs of the lift impression submitted along with
4 the lift. You would fold the photograph and you would
5 put it on the left-hand side beside the known
6 fingerprint and compare through one eyeglass.

7 Q. If I have understood right you have a photograph of the
8 lift?

9 A. Mm-hm.

10 Q. And that's the item that you have folded?

11 A. Yes, in the RUC that would be, yes.

12 Q. I should perhaps ask you -- well, I will stick with what
13 you started off doing and I will ask if it is any
14 different now in a moment. What you are describing what
15 you were trained to do was that you folded the picture
16 and presumably you might have to fold the ten print form
17 as well to get the individual --

18 A. No, you wouldn't -- because of the way the ten-print
19 form is laid out and each digit has been ruled in its
20 own box, you just would fold the photograph so that the
21 edge of the crime scene mark was at the edge of the
22 photograph and then you would move that along.

23 Q. And you would have the two of them under the one glass?

24 A. I would have two of them under the one glass, yes.

25 Q. Is that still how you do it if you were working on a

1 case today?

2 A. Yes, it's how I would do it if I were working on a case
3 today in Edinburgh, yes.

4 Q. You have the two images under the one glass at the one
5 time?

6 A. Yes.

7 Q. How do you move from the one to the other? Are you
8 focussing your eyes on one and then on the other or is
9 it some other process?

10 A. Personally, I would close my right eye, look with my
11 left eye and I'll look at the photograph and then look
12 at the print, look at the photograph, look at the print.

13 Q. So you would have one eye closed?

14 A. Yes.

15 Q. One eye closed looking through one glass and looking
16 from one image to the other under the same glass?

17 A. Yes.

18 Q. Does it ever come about when you are carrying out this
19 process that you will see something on the print that
20 helps you explain something that you hadn't maybe
21 previously understood on the mark?

22 A. No, because in the way that I was trained to do it, I'm
23 always carrying information from the mark to the print
24 and carrying information from the mark to the print.
25 Now, at the same time as I'm carrying information from

1 the mark to the print, I'm looking in the print to see
2 if there's anything that disagrees with what's in the
3 mark.

4 Q. Would it ever be that there's something that -- you know
5 that there's something going on in the mark, you know
6 there's an event of some sort but you don't now what it
7 is, whether it is a ridge characteristic or a piece of
8 dirt or you may be slightly unclear as to what ridge
9 characteristic it is but when you go to the print
10 there's something that you see there that helps you
11 understand what it is you have been looking at on the
12 mark?

13 A. Well, the way I was trained would have been that if you
14 couldn't see -- if you couldn't determine in the mark
15 whether it was dirt or a characteristic or you thought,
16 oh, something might be happening there, then that wasn't
17 something that you relied upon or you brought into play
18 in your comparison process. You brought into play in
19 your comparison process that detail that you could see
20 clearly in the mark so that when I was trained, as part
21 of my training, as an exercise, you would take a mark
22 without a ten-print form, you would take a mark to the
23 comparator, when you were learning how to assess marks
24 for quality you'd take a mark to the comparator and mark
25 up characteristics that you saw on the mark. This was

1 at the analysis stage as opposed to the comparison stage
2 because when I was training we still, although we had
3 the computer systems, we as trainees worked in a manual
4 capacity for at least the first sort of year, although
5 we did do AFR searches but we would have done what are
6 referred to as bundle searches and that is the
7 pre-computer way of trying to identify fingerprints in
8 that you took a crime scene mark, you would have given
9 it a manual classification and then you would go to a
10 corresponding what we call bundle, which is basically
11 just a big pile of fingerprint forms that corresponded
12 to that manual classification.

13 So you would have really analysed your mark because
14 what you were doing was carrying the sequence of
15 characteristics as you compared it against all the
16 bundles. So in the RUC there was still quite a big
17 emphasis on doing that as part of your training so you
18 really learnt how to get in and about fingerprint marks
19 and really look and see what detail was available in
20 there. So, no, the way I was trained is that you carry
21 information from the mark to the print at the same time
22 as you're looking for that sequence so you look for
23 things that might disagree. So say, for example, your
24 sequence in the mark is a bifurcation, two intervening
25 ridges, a ridge ending, two intervening ridges, a

1 bifurcation, that's a sequence you have established in
2 the mark. You then look for that sequence in the known
3 print but it is not enough to just have a bifurcation,
4 two intervening ridges and then a ridge ending. If on
5 the known print there is another ridge ending on one of
6 those intervening ridges that's a disagreement so it
7 doesn't fall into the sequence.

8 Q. I perhaps put things very broadly when I described an
9 event. I said something that could be dirt or a ridge
10 characteristic. What about a situation where you know
11 that or you are certain in your mind you are looking at
12 a ridge characteristic but you are not sure on the mark
13 or the print whether it is a ridge ending or a
14 bifurcation, is it permissible in the way that you were
15 trained and the way you practice to look to the known
16 print to help you reach one conclusion or the other?

17 A. In terms of whether a particular characteristic was a
18 ridge ending or a bifurcation?

19 Q. Yes.

20 A. Well, the thing about ridge endings and bifurcations is
21 that they can appear different, depending on pressure.
22 I'm sure you've probably heard this from other experts
23 but depending on what pressure was applied a ridge
24 ending might get pushed on to a ridge beside it and look
25 like a bifurcation.

1 As a fingerprint person you are -- you're trained
2 and your experience tells you how to anticipate that but
3 just because it might look like a bifurcation in the
4 known print and a ridge ending in the mark doesn't
5 necessarily mean that the known print is the true nature
6 of the characteristic because it might, in the way that
7 it was rolled, it could have been rolled to make it look
8 like a bifurcation. So the thing about it is that you
9 are satisfied that there is enough similarity and enough
10 agreement in the occasion of that ridge ending or
11 bifurcation to satisfy yourself that those are, in fact,
12 the same ridge characteristic.

13 However, there would be instances where you would
14 know that actually it's a ridge ending. It's quite
15 clearly a ridge ending and one is quite clearly a
16 bifurcation and you would know then that they weren't in
17 disagreement, depending on how they appeared. So you
18 might have a ridge ending that's very definitely a ridge
19 ending with nothing around it and if that then was
20 replicated as a very definite bifurcation, perhaps going
21 another direction, et cetera, you would know that they
22 could not be the same characteristic.

23 Q. That is helpful. I think I perhaps interrupted you with
24 a question there but I think you were describing how you
25 would go from the mark to the print until you were

1 satisfied.

2 A. Yes.

3 Q. We have heard obviously now we work under a
4 non-numerical method, whereas previously there had been
5 a defined standard at least for taking things to court,
6 whereby 16 points were required. The non-numeric is
7 described as a non-numeric standard.

8 In terms of thinking of a standard as something
9 against which you can judge whether you've got to a
10 particular result, how does that standard operate in
11 terms of reaching a point of satisfaction?

12 A. In terms of the use of the word "standard", as a
13 benchmark or a line in the sand and if you've reached
14 that point then you know, the non-numeric -- that's not
15 how it operates. It is you look at the mark the same
16 way you would have under the numeric standard. You
17 would have satisfied yourself that that was an
18 identification. The counting of the points for the
19 numeric standard would have come into play subsequent to
20 that. Once you'd decided that it was an identification,
21 you then would have looked at the number of points to
22 see if it met the evidential standard. So the use of
23 the phrase "non-numeric standard", is in some respects
24 confusing because you carry out the process and you keep
25 looking in the mark until you are satisfied but there's

1 not a benchmark standard for the non-numeric.

2 Q. So, in a sense, standard is almost a misnomer. It is
3 more a description of a method of working?

4 A. Yes, that would be my opinion on it, yes.

5 Q. Can you describe how you come to a point of satisfaction
6 given that it is not against a benchmark that we can
7 find written down anywhere?

8 A. Well, you've looked at all of the information that you
9 had in the mark, you have found all of that information
10 replicated in the same order and relationship in the
11 known print and you have found nothing in disagreement
12 and you are satisfied that the two sequences of
13 characteristics and any other available detail that is
14 evident are in complete agreement and that's when you're
15 satisfied with it.

16 Q. You said "nothing in disagreement" there. We have heard
17 some witnesses describe a situation whereby they would
18 get to the point where there was such a volume of
19 information that did agree as between mark and print
20 that they would be certain that even if there was a
21 difference that difference maybe would have to be
22 capable of some sort of explanation because they were,
23 essentially, by that point, satisfied that the two were
24 the same.

25 What is your reaction to that approach?

1 A. Sorry, can I just clarify what you're representing to
2 me?

3 Q. It is probably the fault of my question.

4 What we have heard is that some examiners take the
5 approach that when they find a volume of information in
6 sequence and agreement between the mark and print they
7 may become satisfied in their own minds that there is an
8 identity between the mark and the print and that in that
9 situation there may still be differences, a ridge, for
10 example, that can't obviously be accounted for between
11 mark and print, but there is a volume of information,
12 notwithstanding that difference, such that they are sure
13 that there is identity between the two and that even
14 where they may not be able to give a specific
15 explanation for how the differences occurred, they are
16 sure that there must be some explanation for that.

17 Is that an approach that you would take yourself?

18 A. Personally, my reaction to that would be if you had
19 discovered differences in the mark that you couldn't
20 account for, it would be immaterial what volume you had
21 found in agreement. I would be going back to look and
22 say, well, have I perceived that to be in agreement
23 when, in fact, it's not because if there's any type of
24 disagreement in the mark that cannot be easily accounted
25 for and obviously accounted for, then I would suggest

1 the characteristics you thought you had in agreement
2 were, in fact, not in agreement.

3 Q. You used the phrases there "easily accounted for" and
4 "obviously accounted for". Can you tell us what you
5 have in mind when you use that form of words?

6 A. Well, when I say easily and obviously accounted for I
7 would be saying that there is, you know, creasing or a
8 scarring that might interrupt the ridge flow evident on
9 either the mark or print that isn't evident on the other
10 one that might account for an interrupted ridge flow or
11 that there is dirt or contamination on the mark that has
12 obscured an area on a ridge that you can see in the
13 print.

14 My personal opinion is if you have to try too hard
15 to find an explanation for a disagreement between the
16 print, I would suggest that you need to revisit the
17 whole thing and start again.

18 Q. We have heard the expression ACE, with the analysis, the
19 comparison and the evaluation. Is there a separate
20 evaluation stage or is it in the course of your
21 comparison that you become satisfied?

22 A. Well, during the course of the comparison, if you are
23 continuing to find sequence -- ridge characteristics in
24 sequence and agreement in terms of the order and
25 relationship, yes, at that time you are evaluating it as

1 well but I think that the point of the ACE-V is the
2 separation of the evaluation phase as a phase of when
3 you take it almost a step back or a mental step back and
4 you weigh up all of the information that's available to
5 you. So you've been involved in going through the mark
6 in some detail, in looking at sequences of
7 characteristics and trying to find those in agreement
8 and the evaluation phase is, in my opinion, the time
9 when you just take a mental step back and you say,
10 right, this is what I found in agreement. Is there
11 anything in these two prints that doesn't agree? Is
12 there anything I haven't accounted for? No, I'm
13 satisfied the sequence is good. The order and
14 relationship is good. I'm satisfied that the identity
15 is established.

16 Q. If we can leave perhaps the situation where you are the
17 initial identifier of the mark and move on to a
18 situation where you might be verifying -- before we move
19 to that do you have any personal bottom line when you
20 are operating the non-numeric standard, a number below
21 which you wouldn't go?

22 A. No, I don't have a personal numeric threshold. I would
23 take each mark on its merit and the thing for me is the
24 clarity of the detail that's available in the mark.

25 Q. While I appreciate that your judgments may be specific

1 to individual marks, is there a lowest number as a
2 matter of fact on which you have been satisfied without
3 treating it as a personal threshold?

4 A. I'm sorry?

5 Q. What is the smallest, the lowest number of
6 characteristics on which you personally have been
7 satisfied using this method?

8 A. I wouldn't be able to give that information. I wouldn't
9 have kept a record. You know, you do your comparisons,
10 you come to your conclusions and you state them. I
11 don't keep a mental record of I found so many in that
12 one and I found so many in that one so I wouldn't be
13 able to tell you what was the lowest.

14 Q. If I can then I will move on to the stage at which you
15 might come to a mark in a different capacity, as the
16 checker or verifier.

17 What do you do when you are carrying out that
18 process? Perhaps I should first ask you about the
19 format in which the information comes to you because
20 presumably that is a little different from when you are
21 dealing with the mark as the first identifier?

22 A. Well, in the Edinburgh Bureau, if you are the first
23 examiner you carry out your examinations, you make an
24 identification, you record it on the examination record
25 and then you'll put it in the -- we have what's called a

1 second check tray, and so the second and third check
2 trays are priorities so if you are ready to take another
3 fingerprint case you will go to the second or the third
4 check tray before you take a new case. You would go,
5 you would lift it. The information that would be
6 available to you is the findings of the expert before
7 you, which would be recorded on the fingerprint
8 examination record and also the diary page and what you
9 would do is you would go through all of the case
10 material. You would do another analysis to satisfy
11 yourself that you're satisfied that the marks are of
12 suitable quality for further examination and you would
13 then compare the mark against the form of the person who
14 had been identified to it and the digit.

15 Q. You obviously have some guidance as to which digit to
16 look at?

17 A. Yes, you do.

18 Q. To the extent that you are perhaps analysing for digit
19 determination if you're looking at something as the
20 first examiner, is that something that perhaps doesn't
21 have such an emphasis when you come to do it as a
22 verifier?

23 A. Yes. No, it wouldn't have the same emphasis as in the
24 first examination, no. When you're doing your analysis
25 phase as a verifier you're looking to satisfy yourself

1 that, yes, indeed, the quality of the mark is such that
2 it was suitable for further examination. You're looking
3 to see what ridge characteristics and what sequence and
4 order and relationship you see in that mark, et cetera,
5 before you then transferred that information from the
6 mark to the known print.

7 Q. So to that extent it's perhaps a slightly curtailed
8 analysis? I don't mean this critically but it's not
9 quite the same as you would do if you were coming to it
10 absolutely cold?

11 A. No, you wouldn't be looking to establish, as you say,
12 digit determination or pattern or -- well, you would be
13 establishing pattern but you wouldn't be looking in the
14 same way to establish what finger or what area of palm,
15 et cetera, had left it because you would know that
16 information.

17 Q. So would it be fair to say that you are going straight
18 to look for characteristics that will stick in your mind
19 for further comparison?

20 A. Yes.

21 Q. Then does the process differ in any way from what you
22 have described when you are examining the mark as the
23 first examiner?

24 A. No.

25 Q. I am grateful to you for the description of how this

1 works in practice. What I would like to do now is look
2 at some of the procedures more formally and
3 documentation around identifying marks. I think you
4 have provided us with what is marked as a draft standard
5 operating procedure, if we could look at PS0238. That
6 should come up on the screen for you. If we can put up
7 another page of that, please.

8 We see that that's got an issue date of 20th March
9 of this year and that there has been, would I be right
10 in saying, a complete rewrite of the process at that
11 stage?

12 A. Yes.

13 Q. Can you tell us, because I see that it is marked draft,
14 what the current status of this document is?

15 A. The current status of this document is that when I
16 became Chair of the SAG in May we revisited this case
17 examination document and it's not a million miles away
18 from this one. However, we have reissued it on
19 12th October. I have a copy of the newest one.

20 Q. You have got a 12th October one?

21 A. Yes.

22 Q. It might be at a later stage we can take a look at that.

23 A. It's not a million miles away from this one but it's
24 been --

25 Q. If you would be good enough, perhaps, to point out any

1 differences in any areas that I ask you about and then
2 perhaps we can take copies and get that on the system,
3 the up-to-date version on the system and distribute it
4 to others in the hall.

5 What we see on the right-hand sheet here, which is
6 our page 2, is we see an objective for the procedure.
7 We see various acronyms and technical expressions under
8 the heading "References" and there are various other
9 brief headings down to 7 where can I take it we get to
10 the meat of the procedure?

11 A. Mm-hm.

12 Q. Again, if there are differences between what you have in
13 the October document it would be helpful if you could
14 point them out as we go along here.

15 Should we take it that this is a document designed
16 to set out for staff how they should go about the tasks
17 that you have just described to us?

18 A. Yes.

19 Q. So at 7.1 we see, "Selection of marks for examination",
20 and if I can simply read and again if you can put me
21 right if I am departing from the current version:

22 "Each lift or corresponding photograph (except where
23 multiple photographs are provided, in which case the
24 best photograph selected by the examiner) will be
25 examined to determine how many marks are available for

1 examination. Where the number of marks on a
2 lift/photograph is significant, an assessment will be
3 made, depending on the customer request detailed on the
4 **submission form** in conjunction with the requirements of
5 the **local strategy** of the number of marks on each lift
6 or photograph that will need to be analysed."

7 I wonder if we could take away the first page and
8 get the next page up, page 3. What we see there at 7.2
9 is a procedure for recording on an examination record
10 and communications and explanations being logged on a
11 diary page. I think perhaps a little later on we will
12 go to a case file to look at examples of these documents
13 so everybody can see what they are.

14 At 7.3 and at 7.4, we have descriptions of analysis
15 and comparison. Again, if you can point out any
16 differences between what you have in front of you and
17 what I am reading, under "Analysis", what we see is that
18 on first being allocated a case and then do we take it
19 that that is a reference to another procedures document?

20 A. Yes. The Local Work Instruction allocation of case for
21 examination.

22 Q. That's Local Work Instruction --

23 A. The LWI stands for Local Work Instruction. This was a
24 draft form that was agreed in March and it was trying to
25 update the 9001 quality system to reflect the way that

1 the bureaux were working. That's why it was in draft
2 form and it made reference to various Local Work
3 Instructions, et cetera.

4 Now the reissued document that I have since agreed
5 with the unit managers is a tidier version of that
6 because what we have agreed is that we will have a
7 generic standard operating procedure for case submission
8 and each bureau will have one local work instruction
9 that is entitled case submission and just covers the
10 details with that and there will be one generic standard
11 operating procedure for case examination and each bureau
12 will have a Local Work Instruction entitled case
13 examination. So some of the Local Work Instructions,
14 et cetera, that were referred to in this draft hadn't
15 been written nor will be written, if you know what I
16 mean .

17 Q. I am not quite sure what you mean but are you saying
18 there are now fewer Local Working Instructions then
19 there were?

20 A. Yes.

21 Q. Does any of that affect the content of what we see about
22 the first paragraph under 7.3 or has that essentially
23 remained the same?

24 A. It's essentially remained the same, yes.

25 Q. And the second paragraph again is --

1 A. Is essentially --

2 Q. -- a procedural matter about annotating with unique
3 reference numbers.

4 A. Yes, and that's essentially the same as well.

5 Q. When we get to the third paragraph and, again, tell me
6 if this varies:

7 "Each individual selected mark is analysed to
8 establish the quality of detail contained within the
9 mark and its suitability for further examination. As
10 part of the analysis all available information is taken
11 into account such as surface effect, pressure,
12 distortion, et cetera, see guidance within NPIA training
13 manual. Marks which are deemed unsuitable for further
14 examination are noted as insufficient/no value on the
15 relevant line of the relevant examination record."

16 Should we take it that is the extent of the current
17 written guidance in the standard operating procedure as
18 to how analysis is to be gone about?

19 A. Yes.

20 Q. That is not something that has changed in substance in
21 the draft you have got in front of you at the moment?

22 A. No.

23 Q. Should we also take it then that what we see at 7.4 is
24 the extent of detail about -- in terms of written
25 instruction as to how an examiner is to go about the

1 comparison phase?

2 A. Yes.

3 Q. Looking at 7.6, there's a description there of
4 evaluation and what's described is the Fingerprint
5 Examiner will weigh up all of the available information
6 in the mark and come to his or her conclusions about the
7 identity of the mark in relation to a comparison print.

8 Again, is the substance of that the same in the
9 current document?

10 A. Yes.

11 Q. Again, that would be the sum of the detail in terms of
12 written instructions to examiners about how to do that
13 part of the task?

14 A. Yes.

15 Q. I would like at this stage to look at some of the
16 recommendations that were made in the OIG Brandon
17 Mayfield Report about standard operating procedures and
18 about analysis and documentation of analysis. We can
19 take that down for the moment and turn instead to
20 document AP0006, which is chapter 5 of the OIG report.
21 It is page 4 of our pdf and recommendation 3 that I am
22 interested in at this point.

23 We do have quite a lengthy passage but I think it
24 would be helpful to have your comments on some of what
25 we see here.

1 What the recommendation is is essentially for detail
2 to be added to existing protocols and standard operating
3 procedures regarding the definitions and processes in
4 the components of ACE-V. There is a little more detail
5 about what the OIG thought was wrong with the FBI's
6 previous examination standard operating procedures when
7 we go to the long paragraph beginning with "As", if you
8 can see that.

9 Looking to the fourth line there, what is written is
10 that:

11 "The documents comprise a total of 11 pages. Much
12 of the contents are repetitive and all are stated in
13 vague in general terms."

14 Coming to the substance of this it says:

15 "Nothing in the existing standards governing the LPU
16 [which I think was Latent Print Unit] prohibited,
17 discouraged or even addressed the process of circular
18 reasoning by which Green apparently allowed the Mayfield
19 exemplar to bias his interpretation of LFP17", which was
20 the latent print under discussion in that case.

21 In terms of anything in your standard operating
22 procedure addressing the potential problem of circular
23 reasoning which we have heard is the process of taking
24 information from the print to the mark in an
25 impermissible way, how is that addressed procedurally in

1 your organisation?

2 A. We don't have anything in our procedures that refer to
3 circular reasoning. These things are dealt with at the
4 training stage but they are not then documented as part
5 of standard operating procedures for operational
6 experts.

7 Q. If I can go on to the next item, they go on to say:

8 "Nothing in these documents prohibited an examiner
9 from cherry-picking helpful Level 3 Details to support
10 an identification while discarding those which did not
11 or described the circumstances under which Level 3
12 Detail is sufficiently reliable to use."

13 Again, I would take it from what we have seen there
14 is nothing in terms of standard operating procedures
15 within SPSA at the moment addressing that particular
16 point?

17 A. That's correct.

18 Q. Moving on to the next sentence:

19 "Nothing in the standards required the examiners to
20 justify their explanations for differences in appearance
21 between the latent and known prints on the basis of
22 objective information from the print or the crime scene
23 to demonstrate any degree of certainty with respect to
24 such explanations, or even to document the differences
25 or explanations at all."

1 So we're into the area of justifying and documenting
2 differences and explanations. Again, in terms of
3 standard operating procedures, is there anything within
4 SPSA that deals with this particular issue?

5 A. In terms of the standard operating procedures there
6 would be nothing that specifically would deal with that.
7 There's an understanding that if people or examiners
8 wish to make comment about particular things they have
9 observed in the mark they can do so on the diary page
10 but in terms of the standard operating procedures we
11 don't have a formal requirement.

12 Q. Starting with the next sentence there:

13 "Likewise, although all of the OIG consultants
14 agreed that lesser individualising weight should be
15 assigned to a Level 2 ridge deviation found in agreement
16 where the examiner cannot determine whether the point is
17 a bifurcation or an ending ridge until he sees the
18 exemplar print, nothing in the existing standards gives
19 any such instruction to LPU examiners."

20 I think there are probably two questions I have to
21 ask you there. First, would you agree with the
22 proposition that you should give less weight in an
23 identification to a Level 2 ridge detail if you've not
24 been able to tell from the crime scene mark alone
25 whether it's a bifurcation or a ridge ending?

1 A. Well, it depends on what you mean, what the report
2 writer means by a lesser individualising weight.

3 Q. I think I would be explaining it and paraphrasing it
4 correctly if I said that what they are suggesting is
5 that if one has to regard some features as being more
6 strongly supportive of identity than others, one would
7 have greater confidence in features which, when one
8 looks at the latent, one is quite clear in one's own
9 mind as to which type of feature they, and that if one
10 is only clear in one's own mind about what type of
11 feature one is looking at after one has had the
12 assistance of looking at the print, then that is
13 something that would be less strongly supportive towards
14 making the identification.

15 A. Well, I think how I would respond to that would be if I
16 was looking at a mark and I was looking at the
17 information in it and I was looking to see, right,
18 bifurcation, two intervening ridges, a ridge ending,
19 well is that a ridge ending or a bifurcation? Right,
20 well, there's definitely a characteristic there. If I
21 was making a comparison and I was clear about the
22 majority of the characteristics, well then, yes, I can
23 see that you would give a lesser individualising weight
24 to a characteristic that wasn't clear.

25 If I was making a comparison and in my head I'd

1 looked at the mark and determined that it was
2 bifurcation, ridge ending, bifurcation, ridge ending,
3 for example, for a sequence and when I went to the print
4 it was, you know, four ridge endings and yet I was
5 already quite clear in the mark that they had been
6 bifurcations, if I was having to tell myself too often,
7 well, it could be pressure that's pushed that on to
8 there or made that ridge characteristic look too
9 different, if I was having to tell myself that too often
10 in a mark I would start to doubt whether the sequences
11 were, in fact, in agreement.

12 So I would agree that whilst I wouldn't say that if
13 something appeared as a ridge ending in the mark and
14 then appeared as a bifurcation in the print, I wouldn't
15 see that as a difference that would rule out the
16 identification. If it happened consistently throughout
17 the comparison, then I would see those as differences
18 that I would have to have a second think about.

19 Q. So you perhaps would not, on the first point,
20 necessarily agree with the quite stark proposition about
21 individualising weight that we see there?

22 A. I think it would depend on the mark and it would
23 depend -- I don't think that you could say in every case
24 you'd give it a lesser individualising weight. It would
25 depend on the cumulative information that you had

1 available in that mark and, as I said, if you were
2 having to say, "Oh well, it's a ridge ending in the
3 mark", and then, "Oh, but it looks like a bifurcation
4 there", or, "It could be this, it could be that", if
5 you're having to say that too often when you're doing
6 your comparison then I would suggest you need to rethink
7 that.

8 Q. Just thinking to that account that you have given that
9 you shouldn't be too often in the course of an
10 identification having to explain things to yourself, if
11 I can put it that way, there's nothing in terms of
12 written procedure, would I be right, within standard
13 operating procedures or anything of the type within SPSA
14 that conveys that precise message to a reader?

15 A. No, there's nothing within standard operating procedures
16 because these are the kinds of issues that are covered
17 in the training programme, thereby when one has
18 successfully completed and been assessed competent as an
19 expert it's understood that you have developed and
20 demonstrated and been assessed in your skills and
21 ability to apply that kind of reasoning to your
22 comparisons. So, yes, it's not covered in the standard
23 operating procedures because the understanding is that
24 the standard operating procedures are written for
25 operational experts who have been assessed in their

1 ability to apply that kind of reasoning and for trainees
2 who are undergoing the training programme and would
3 refer to the standard operating procedures to find out,
4 you know, administratively almost what to do with the
5 case, that kind of reasoning would be covered in their
6 training guidance.

7 Q. What seems to have concerned the investigators in this
8 case is that the examiners were able to make what they
9 felt had been mistakes of reverse reasoning, of
10 cherry-picking Level 3 Detail, and not accounting
11 adequately for differences. They had been able to do
12 all those things which were held to have contributed to
13 the mis-identification in that case without actually
14 specifically contravening any of the written
15 instructions and I think that's what we see in the last
16 sentence of that long paragraph there. That seems to
17 have been the concern.

18 Seeing that that is the concern in what has been a
19 fairly high profile international case, has there been
20 any consideration to drafting a detailed standard
21 operating procedure with the sorts of matters that the
22 investigators here are highlighting?

23 A. Well, in terms of drafting detailed standard operating
24 procedures, it might be helpful if I explain just where
25 we were in terms of the standard operating procedures.

1 Under the Scottish Fingerprint Service we had group
2 accreditation to ISO9001 standard. When we moved over
3 to SPSA there was -- there's a plan for transition to
4 this new 17025 standard to bring us into consistency
5 with the laboratories and their quality standards.

6 As part of that process, which obviously will be
7 administrated by those qualified to do it, ie the
8 quality managers, which is not myself, as part of that
9 process and the plan I put to Mr Nelson was a step
10 1 which was to take the 90001 documents which hadn't
11 been updated to reflect how we worked now and hadn't
12 been updated in terms of new rules and responsibilities
13 that had come into being when we moved to SPSA. So we
14 were taking the 9001 manual and we're updating these
15 documents to just be more accurate in what we're doing.

16 The next stage of the process is to meet with the
17 quality managers and to see what the requirements of the
18 17025 standard would be in terms of the detail of the
19 standard operating procedures and from my limited
20 understanding of 17025 is there is requirement for
21 greater detail around these kinds of issues in your
22 standard operating procedures.

23 At that time, it was my intention to work with the
24 fingerprint side with the other unit managers on the
25 fingerprint side and start a review of our approach to

1 the fingerprint examination process and at that point
2 take in recommendations such as this and current
3 developments in the fingerprint world and see about
4 making our standard operating procedures much more
5 effective documents. At the moment under 90001 they can
6 be descriptors of how we go about our business.

7 Q. I am probably putting this too crudely but standard
8 90001 is a management standard and you have to have
9 procedures and you have to stick to them?

10 A. That's my understanding of it.

11 Q. Whereas 17025 may take more interest in some of the
12 content of the procedures. Would that be fair to say?

13 A. Again, that's my understanding of it but I'm not, you
14 know, obviously, I'm not a quality manager so I'm not
15 completely up-to-date with the standard but that is the
16 stage of the process which we're hoping to begin either
17 before Christmas or just after is to sit down with
18 the quality managers and look at technical requirements.

19 Q. Supposing that standard 17025 doesn't require everything
20 that's in the Mayfield Report here, might it still not
21 be worthwhile considering just exactly these matters,
22 given that they have been factors that have been found
23 in a high profile international mis-identification to
24 have led to the mis-identification and something that
25 the OIG thought should be changed?

1 A. Yes, and I would say in my opinion it would definitely
2 be my recommendation that we look at these things and we
3 balance them against the practicalities of the business
4 need and that is the -- stage 2 and stage 3 of the plan
5 I put to Mr Nelson was that stage 3 would be a best
6 practice review of how you approach a fingerprint
7 examination and make sure that we are taking into
8 account developments, et cetera, that have happened.

9 Q. I would like to ask you about another part of the
10 Mayfield Report so if we can stay on the same document,
11 please, and move to recommendation 10 at page 8, this is
12 moving on to the recommendations about documentation
13 requirements and if I can read out from recommendation
14 10 here:

15 "The OIG agrees with the Latent Review Team
16 recommendations for more extensive documentation
17 requirements. The absence of substantive documentation
18 requirements is a conspicuous shortcoming of the current
19 standard operating procedures. We believe that there is
20 a strong possibility that if the examiner and verifier
21 had been required to document the analysis and
22 comparison phases of their examinations, they might have
23 noticed more dissimilarities and appreciated the
24 cumulative impact of them before reaching their flawed
25 conclusions. They might also have had greater

1 appreciation for the low quality of the admitted
2 similarities between the latent and the Mayfield known
3 prints. We believe that documentation would have
4 facilitated a more objective comparison and evaluation,
5 regardless of the particular standard utilised to
6 declare an identification."

7 They then go on to say that the absence of
8 substantive documentation impacted on their ability to
9 determine the cause of the error and what they seem to
10 be getting at there is that if there's no documentation
11 it can be much harder to go back and see how people have
12 gone about things, I suppose, in the sense of auditing
13 and, if something has gone wrong, to see where it has
14 gone wrong.

15 It is probably fair to say thereafter two points
16 there in the passages that I have just read out to you.
17 One is that the process of documentation may help to
18 avoid error and, second, that it may be something that
19 is useful for anybody who has to see what has been done
20 and how it's been done.

21 Sticking with the first of those points I know you
22 were asked about documentation when you gave your
23 statement in the first instance, Mrs Tierney, and I
24 would like to take you to paragraph 29 of your statement
25 FI0152, page 9. You had you have just been asked about

1 the process of analysis, I think. I think you actually
2 prepared the statement yourself rather than somebody
3 coming and asking you questions but you had been asked
4 questions in writing, I think, when you were preparing
5 the statement?

6 A. Yes.

7 Q. You say you were asked to explain why the phases of the
8 process are not documented and you say that
9 documentation is not necessary for an expert to carry
10 out their work effectively.

11 Now, it would appear, on the face of it, that the
12 OIG investigators thought that the effectiveness of the
13 operation would have been improved at least to the
14 extent of perhaps assisting people to recognise
15 differences and appreciate the cumulative impact of
16 those.

17 Do you differ from what the OIG thinks about this
18 particular usefulness of documenting the process?

19 A. Well, I think that the two, you know, what I have
20 written in my statement and the OIG report are talking
21 in slightly different contexts. What I'm talking about,
22 documentation is not necessary for an expert to carry
23 out the work effectively in terms of the practical
24 comparison and analysis process because it's a mental
25 process. You are taking information and you are looking

1 to find that in a known print and then you're coming to
2 your conclusions. So it's a practical process and you
3 record your findings.

4 Now in terms of the report, they are talking about
5 using documentation, from what I understand from the
6 report, they are talking about using documentation to go
7 back and review an analysis and review what was the
8 thought process at the time.

9 Q. The way that I read it out to you was certainly intended
10 to be that perhaps there was a second aspect, that it
11 would help, it could help somebody who had to examine
12 things later to know what thought processes had been,
13 but what they seem to be suggesting, if we can go back
14 to page 8 of AP0006, is if people are documenting what
15 they are doing -- and perhaps we are all familiar with
16 this, if we start to write down our reasoning, sometimes
17 we start to notice flaws in it rather than more readily
18 than when we are carrying ideas simply in our head and I
19 think what is perhaps being suggested here is that if
20 whether by writing things down in script or perhaps in
21 this context, more likely, by doing drawings perhaps
22 with ridge counts or something of that sort as they went
23 along, they might have noticed that they were perhaps
24 making too many of the sorts of judgments that you
25 described earlier in your evidence in the course of

1 going about this and that actually documenting them
2 would help them to notice that they were doing something
3 that you have described as not a desirable practice.

4 So it would seem to be suggesting on that basis that
5 it does have a usefulness at the practical level of
6 carrying out the identification rather than just as an
7 audit tool for afterwards.

8 In that sense do you disagree with what they are
9 saying?

10 A. No, I don't disagree on the face of it with what they
11 are saying and I can see that what they are saying is if
12 they were having to say "Well, it could be this and it
13 could be that and I can account for that" that if they
14 had seen that written down, then it might have suggested
15 to them actually that's quite a lot of could be's with
16 this identification. Is that your understanding?

17 Q. That is what I am suggesting to you.

18 A. I can see that there may be merit in that but what I
19 would say is that 9 times out of 10 when you are
20 conducting a fingerprint examination the fact that you
21 are conducting your examination and you are not having
22 to find could be's, could be's, then it doesn't impact
23 on your effectiveness in doing the job whether you are
24 writing that down or not. I can see there that perhaps
25 if you are having to account for differences that we

1 could have a formal requirement to write that down or to
2 record that, but I think that there needs to be
3 consideration or a recommendation like that in terms of
4 the impact on the business process and in terms of the
5 impact on your turnaround times. But I wouldn't be
6 discounting it. What I would be saying is we would need
7 to look at that in terms of a practical, operational
8 Fingerprint Bureau.

9 THE CHAIRMAN: Would there be a possibility that you
10 wouldn't do it in every case because some cases, I
11 imagine, are quite straightforward? We have had
12 reference to marks as being "complicated" marks so that
13 when you are working with a mark that's complicated, it
14 might be helpful to keep a note as you go along.

15 A. Yes and I can see that there would be merit in that. It
16 depends on the purpose of it and the stage in the
17 proceedings of the examination. The majority of our
18 work is conducted to provide intelligence outcomes to an
19 investigation as opposed to providing court reports. So
20 when you are doing a comparison at an intelligence
21 stage, you are doing that comparison against a set of
22 fingerprint forms that are held on file for somebody
23 that are not necessarily relating to the particular
24 crime of the marks in front of you.

25 MISS CARMICHAEL: So you have been given a crime scene mark

1 and you have a previous set of prints for the person for
2 the reasons that we can probably all imagine.

3 A. Yes. So you're carrying out your comparisons or you're
4 carrying out your searches against those fingerprint
5 forms which you are legally allowed to hold. When you
6 come to a court report or a court stage, if you get a
7 statement request, you then will be looking and will
8 only do your comparisons against the set of fingerprints
9 that have been taken in relation to that charge. So
10 that's a completely different comparison because it's a
11 completely different set of prints.

12 So in terms of, for example, in the Edinburgh Bureau
13 we processed between April 2008 and March 2009 just
14 short of 1,500 cases. That resulted in a request for 90
15 statements. So it's roughly about 6 per cent of your
16 work resulted in a request for court and of those we
17 were asked to give oral evidence on three occasions. So
18 you have the bulk of your work being done at an
19 intelligence stage when you are offering information to
20 assist progress an investigation and that results in 90
21 statement requests out of 1,500 cases. So it may well
22 be that at reporting stage when you are doing a
23 completely fresh comparison against a different set of
24 prints that there's implications there for recording
25 more detailed analysis.

1 To do that at intelligence comparison stages would
2 have a significant impact on your turnaround times and
3 actually the value that the information you eventually
4 produce adds to the investigation in undetected crimes.

5 So that's the business context you would have to look at
6 with the introduction of those kinds of procedures.

7 Q. Thinking about those two different stages of your
8 business, thinking about the intelligence stage at the
9 first instance, in what sort of proportion of the marks
10 that you look at at that stage would there be marks that
11 you would regard as complex marks?

12 A. Well, it would be difficult to actually calculate a
13 figure on that. What I could tell you for the Edinburgh
14 Bureau of all the marks submitted to us by our Scene
15 Examiners we roughly retain round about 90 to 95
16 per cent of those as value marks which we would take
17 forward for further comparison.

18 Q. As opposed to being regarded as completely insufficient?

19 A. As opposed to being -- so 5 per cent of the material we
20 receive in we write-off as being unsuitable for further
21 examination. So it's the marks that would be borderline
22 on that decision, I suppose, would be your complicated
23 marks but you satisfy yourself at analysis stage that
24 they are suitable for further comparison. If you're
25 satisfying yourself that they are suitable for further

1 comparison at that stage, then I would suggest, you
2 know, they shouldn't be that complicated when you come
3 to comparison because you've conducted analysis, you've
4 satisfied yourself that there's enough detail in that
5 mark to take that forward for further examination.

6 Q. But there must be some gradation between -- I think one
7 example one witness gave was a lovely, clear fingerprint
8 on a rear view mirror, a clear mark on a clean flat
9 surface with lots of detail. There must be some
10 gradation from that to the marks which are, as you
11 described, the borderline. What I'm wondering is if
12 there is any way or any description of quality that you
13 can use to describe a category of marks that might be
14 likely to cause more difficulty?

15 A. There would be marks that would cause more difficulty,
16 yes. There are grades in the quality of them but in
17 terms of incorporating that into a prescriptive standard
18 operating procedure would be challenging because each
19 mark would need to be (a) judged on its own merit and
20 the examiner looking at it would need to apply their
21 subjective judgment as to whether that mark fell in the
22 "complicated" category or not. So your standard
23 operating procedure if you were to say, "Right, we will
24 keep more detailed notes in complicated marks" would
25 still call for a subjective judgment on the part of the

1 examiner as to whether a particular mark constituted a
2 complicated mark or not.

3 Q. I suppose there could be criteria --

4 A. Absolutely.

5 Q. For example, if there's movement or distortion
6 suspected, those might be criteria?

7 A. Yes, you could include criteria. You could include
8 criteria along clarity, substrate, interference, those
9 kinds of things that are in that analysis stage but
10 ultimately it would be a subjective judgment on the part
11 of the examiner as to whether it fell into that or not.

12 Q. So while one might have some criteria, another
13 suggestion that we heard a lot earlier now in these
14 proceedings was that there might be, I suppose, a range
15 of sample images with things that are then clear at one
16 end of it and with lower image quality at the other end
17 of it to give perhaps an objective standard that
18 everybody could work to in terms of recognising when
19 something was a clear image or not a clear image. Is
20 that a useful suggestion?

21 A. Well, I mean, in terms of a standard operating
22 procedure, it would give an indication of what you're
23 talking about in terms of complicated or less
24 complicated marks, yes. But that kind of activity is
25 covered as part of the training programme when trainees

1 are gaining experience in mark assessment and mark
2 analysis about what constitutes a quality mark and what
3 constitutes a mark of insufficient value. So, yes, you
4 could put together a grading system but ultimately it
5 would be subjective.

6 Q. Understanding it's subjective and that this makes this a
7 difficult area for discussion, do you have encounter a
8 situation where there's a mark that you feel, "Well,
9 actually I'd quite like to note that down because this
10 is tricky and, you know, if somebody asks me about this
11 later, it would help me to have a note of what I've
12 done"?

13 A. I think, yes, there's value in that when you are
14 comparing marks against a charge set of prints which
15 could potentially then be called to court and where you
16 might be in a situation where you'd be asked about it.
17 Yes, I could see that there would be advantage.

18 Q. I appreciate it was a very rare case in which a
19 fingerprint comes to be disputed or regarded as a
20 mis-identification, but is there a risk that if one has
21 looked at a mark at the intelligence stage and makes a
22 particular conclusion on it that is something that could
23 be carried forward into the conclusions at the later
24 stage when court is being prepared for?

25 A. Well, at the intelligence stage the decisions that you

1 would be making about marks at the analysis stage would
2 be are they suitable for comparison or are they not and
3 if they're not suitable for comparison at the
4 intelligence stage, then I would suggest they wouldn't
5 be suitable for comparison.

6 At a court stage, the only conclusion that might
7 change from the intelligence stage to the court stage is
8 the fact that you might have made identifications or
9 failed to identify things at the intelligence stage
10 because of areas and quality of the ten-print form and
11 then at the court stage, when you are working with a
12 different ten-print form, which is the charge set of
13 prints, which may be of greater quality or poorer
14 quality or may have areas disclosed that weren't
15 disclosed on the original ten-print form you compared
16 with, your conclusions might change and you may be able
17 to identify more marks against that particular set of
18 prints or not make some identifications that you made
19 against the other set of prints due to the quality of
20 the form.

21 Q. Thinking back to the recommendations in Mayfield, let us
22 suppose that at the first stage that somebody looks at a
23 mark at the intelligence stage they have made an
24 identification unaided by any sort of note-taking and
25 have come to some sort of error in doing so. Is there a

1 risk that an error at that stage, which might have been
2 avoided I suppose by documentation at that stage, might
3 come to be carried forward to the stage when something
4 is being examined for court?

5 A. Well, if somebody made an error at that stage in terms
6 of an identification that isn't an identification, an
7 incorrect identification, if they made an error at that
8 stage I would expect it to be picked up through the
9 verification process. If it wasn't picked up in the
10 verification process and then it came to the court stage
11 then, yes, there is a risk that it wouldn't be picked up
12 at that stage but we have procedures in place, dip
13 sampling, where 5 per cent of case material is reviewed
14 every month that we would hope to pick that up but, yes,
15 there's always a risk.

16 Q. So to that extent there might be some value to
17 documentation of perhaps a complex mark even at the
18 earlier stage, at the intelligence stage?

19 A. Yes, there could be.

20 Q. I would like to move on, please, to recommendation 11 in
21 the Mayfield Report which we find at page 9 which I hope
22 will appear in full size for you, Mrs Tierney.

23 What we have here is a particular recommendation
24 about documenting the analysis stage and, again, I will
25 read through that for you:

1 "The OIG recommends that the FBI laboratory consider
2 a refinement of the proposed changes to the
3 documentation requirements in the SOPs. Although the
4 proposals regarding documentation would require
5 identification of the level 1, 2, and 3 features that
6 contributed to the examiner's conclusion, they do not
7 appear to require any documentation of the analysis
8 phase. Documentation of the features and red flags
9 observed during the analysis phase will help prevent
10 circular reasoning in which features in the known prints
11 can influence an examiner to find such features in the
12 latent print, even though they may not be there. Where
13 feasible, a record should be made of the analysis phase
14 of the examination, including the location and type (if
15 known) of the features perceived at that phase."

16 So what seems to be suggested is that notes are
17 taken of where the features are and, where possible, the
18 type, for example, noting that it was a ridge ending or
19 a bifurcation.

20 Now the practicalities of the situation are
21 recognised, I think it is fair to say, by the OIG
22 because if we move on to the next paragraph, what they
23 say is they recognise that could be burdensome. They
24 are talking particularly in the context of automated
25 searches but I am sure it would apply in other types of

1 comparisons as well. It might be rather burdensome if
2 done in absolutely every case.

3 What they suggest is that:

4 "A requirement to document the analysis could be
5 postponed until the examiner determined on a preliminary
6 non-exhaustive initial comparison, that one of the
7 candidate's exemplars [that is the known print in our
8 more familiar language] is sufficiently similar to
9 warrant a more rigorous examination."

10 If we move on to the next page, what is suggested
11 is:

12 "At that point, the operating procedure would
13 require the examiner to put the exemplar aside and
14 complete the documentation of the analysis of the latent
15 print before proceeding to the comparison and evaluation
16 phases of the examination."

17 On that perhaps slightly more limited proposal, I
18 wonder if you could comment about whether that is
19 something that, first, has been considered and, second,
20 is something that would be capable of adoption in
21 practice?

22 A. Well, it wouldn't be something that we've actively
23 considered. As I say, we haven't formally taken the
24 recommendations of -- well, not to my knowledge unless
25 it's been done at executive level, but certainly we've

1 not been passed the Mayfield Report collectively as unit
2 managers and asked to discuss it or the recommendations
3 therein.

4 That said, having looked at the point, they are
5 talking in the context there of an AFIS or our system is
6 Ident 1 search, at which point when you sent a mark for
7 search you get back a candidate list and, as you are
8 going through that, there may be ones that you would
9 stop and think, "Right, okay, I'll have another look at
10 that", there would be ones that you would discount at a
11 quick glance, and then there would be ones that you'd
12 stop and have a look at, and then there would be ones
13 that you'd stop and you'd mark-up your minutiae that you
14 can see in common, et cetera.

15 Now, at that point, I think what they are talking
16 about is instead of proceeding to mark that an
17 identification is to stop at that point and then go back
18 and complete an analysis of the mark and any red flags,
19 et cetera, that call out then. That is feasible, but I
20 would suggest that you would need to look at the types
21 of cases and the types of searches that you did that in
22 because, again, the impact of pausing your search, the
23 whole point of the Ident1 system with the computer, any
24 of the computer systems, was to speed up the turnaround
25 times for your case material and to allow you to search

1 the fingerprint collections much more quickly.

2 So there are ways that you could look at it of
3 applying some of these recommendations and to balance
4 that against the impact on the business need, do you do
5 it on all the marks in the case? For example, in a
6 serious case, you could have 200/300 marks in that case.
7 To kind of do this process in all of those marks the
8 case would never be complete in any kind of time-frame
9 that would be of use.

10 Q. Two further questions then, one again limiting the
11 process to something. If criteria could be reached for
12 identifying what is a complex mark, would that be
13 something that would be more feasible?

14 A. I think that would be more feasible certainly than
15 saying that if you came across either -- although they
16 are talking in the computer context here, even in a
17 comparison there might be forms that you think, "Right,
18 okay, I'll take a second look at that one, I'll have
19 another go, something caught eye there, I'll have
20 another look at it", to stop your process then to then
21 go back and write an analysis, to then return to the
22 process, I think would have a massive negative impact on
23 your ability to turn your cases around. But it may well
24 be that it could come into play in complex marks or
25 marks where there are elements at your analysis phase

1 where you have thought, "I'm not quite sure about that"
2 or "That's not immediately apparent what that
3 characteristic is".

4 Q. I think you started to touch on what my next question
5 was going to be which is that is something that could
6 arise in a situation where you are looking at ten-print
7 forms which have been given to you as eliminations in a
8 case potentially, just as in a situation where the
9 computer gives you a certain number of possible matches?

10 A. Yes, that is something that can arise with ten-print
11 forms and you can see certain similarities in terms of
12 characteristics in order and relationship and you want
13 to look at that again and satisfy yourself whether they
14 are, in fact, in agreement or whether they are not in
15 agreement. So it certainly arises in minor comparisons
16 as well.

17 Q. Given that you've told us the detail of these
18 recommendations isn't something that's been directly
19 taken up, would it follow from that that nobody has in
20 any detail addressed themselves to what any resource
21 implications might be or how recommendations of this
22 sort might operate in practice?

23 A. Certainly not at Fingerprint Manager level. It's not
24 something that -- as I say, it could have been addressed
25 at Executive level with the Forensic Services but it's

1 not something that we've been asked to look at either as
2 individual managers or collectively as the Fingerprint
3 SAG.

4 Q. I would like to show you a document, please, DB0768. I
5 am not sure whether it is on the system yet. I
6 understand it is.

7 I should explain what this is and what the extent of
8 my own knowledge about this document is, Mrs Tierney.
9 It is a document that has come from Mr Zeelenberg and
10 been translated and which I understand is a document
11 that is used in the bureau where he works.

12 I understand that Mr Zeelenberg was one of the
13 International Panel of Experts who was at one stage
14 assisting your own organisation?

15 A. That's correct, yes.

16 MR SMITH: I am sorry to interrupt. I don't know if it
17 would be of some assistance but, as far as this document
18 is concerned, Mr Zeelenberg talked me through what it
19 means and it may be easier, and certainly one of the
20 things I was going to ask to ask questions about in due
21 course, it may be easier than Miss Carmichael, who I
22 have not had a chance to discuss it with, what the
23 procedure is involving it. I am quite happy to do that
24 in due course, but of course if Miss Carmichael wishes
25 to launch into, I am sure she will be capable of doing

1 so.

2 THE CHAIRMAN: Would it be convenient to let it happen that
3 way and then you can re-examine about it?

4 MISS CARMICHAEL: I am quite happy to do it that way. If
5 anything arises in re-examination, then that is
6 perhaps a useful shortcut. I am grateful to Mr Smith
7 for the suggestion. Perhaps we can give the witness a
8 paper copy to look at in perhaps more detail as well
9 before that examination arises. I will leave that
10 particular suggestion.

11 We have been looking at the Mayfield Report but
12 there is another report I would like you to have a look
13 at on the theme of documentation as well and I wonder if
14 we could have SG0375, page 3. This is a document from
15 2000 which is part of the HMIC inspection of the SCRO
16 Fingerprint Bureau from that period. What we see under
17 the heading "training" is, amongst other things,
18 paragraph 8.1.9 which touches on the theme of
19 documentation. I would like to put this to you for
20 comment, given it is an older document, and, what is
21 more, a Scottish document. We see:

22 "Under the current 16-point standard in Scotland [as
23 it was at the time] experts do not regularly and fully
24 document their thought processes in reaching a
25 conclusion in respect of a comparison. Where a number

1 of experts confirm that at least 16 identical
2 characteristics have been found in both a crime scene
3 mark and a fingerprint, neither the location nor nature
4 of these characteristics are routinely documented. This
5 is only done when photographic enlargements of the mark
6 and print in question are requested for court purposes,
7 then the experts would chart the 16 points identified.
8 Moving to a non-numeric standard will result in a range
9 of approaches for an expert to reach a conclusion.
10 Because these will not always be as straightforward as
11 'counting points' HMIC believes there is a need for
12 experts to record their reasoning and findings in each
13 case."

14 So it appears there that in 2000 there is a
15 suggestion from HMIC that documentation will be required
16 and by inference from what we see in the fourth and
17 fifth line there as to the nature and location of
18 characteristics viewed in the course of making a
19 non-numeric identification and, given the provenance of
20 this, I am wondering why that hasn't perhaps more
21 obviously been taken up by SPSA and its predecessors?

22 A. Well, in terms of the training aspect of it, we did take
23 it up in the training department with the ACE-V sheets,
24 which I'm sure Mr McGinnies talked you through.

25 Q. We have seen those, thank you.

1 A. In terms of how and why that wasn't taken up as part of
2 the standard operating procedures, I wouldn't be able to
3 answer. What I would say is that there was the diary
4 page was introduced. I'm not sure whether it was before
5 or after this recommendation came out, but the diary
6 page was introduced and there was an understanding that
7 you could record your reasoning and findings on the
8 diary page but there was not, as far as I'm aware, a
9 formal requirement to record characteristics and what
10 you find in the sequence you find them in covered in the
11 standard operating procedures and there isn't a
12 requirement for that at the present time.

13 Q. What we do have here is what seems to be a pretty
14 straightforward recommendation that simply hasn't been
15 taken up and I'm wondering if there's any obvious
16 explanation for that because I think you said the diary
17 page, it might be used but it certainly wouldn't
18 routinely be used for something of this sort?

19 A. I wouldn't be able to comment on why that wasn't taken
20 up because obviously at the time I was an operational
21 expert and when I became involved at management level it
22 was in the capacity as Training Manager so I wouldn't
23 have had authority or input into standard operating
24 procedures.

25 I'm obviously an operational manager now and in my

1 capacity as Chair of the SAG I have raised with the
2 other unit managers the issue of note-taking and what
3 would be appropriate and what wouldn't be appropriate
4 and we're hoping to take that forward along with the
5 quality manager's recommendations as a part of 17025
6 transition but why that wouldn't have been uptaken in
7 2000 or subsequently I wouldn't be able to comment on.

8 Q. Has the SAG at any point gone back to HMIC report and
9 looked and thought, well, is there anything that was
10 recommended back there that for some reason has slipped
11 through the net?

12 A. The Fingerprint Scientific Advisory Group is myself and
13 the other three unit managers and our remit and the
14 scope and extent of our authority is to look at
15 operational level processes and procedures and
16 administration of the fingerprint examination process.

17 In terms of reviewing documentation and reports and
18 recommendations, that wouldn't be something that would
19 fall within our remit at the present time unless we were
20 specifically directed to do so by Mr Nelson and in terms
21 of the HMI report in 2000, as far as we would
22 understand, that would have been dealt with by the SPSA
23 Exec in terms of discharging of those recommendations.

24 Q. Still on the theme of documentation, you refer in your
25 statement to some discussions that had taken place, I

1 think, on the SAG slightly before your time on it
2 involving a Miss Marjoram?

3 A. Yes, that's correct.

4 Q. I think Miss Marjoram had visited the Forensic Science
5 Service in England?

6 A. That's what I've been informed. The discussions you
7 refer to were minuted in the Scientific Advisory Group
8 minutes. At that time I was on maternity leave and the
9 Scientific Advisory Group was not a unit manager group.
10 It had expert representatives from the bureaux attending
11 that group and it was chaired by the unit manager in
12 Aberdeen.

13 When asked about -- when I was preparing my
14 statement I was asked about the comments in the SAG
15 minutes and I asked the then Chair to give me some
16 background on how the comments arose and he informed me
17 that, yes, indeed as part of her quality assurance remit
18 she had been asked to visit the Forensic Science Service
19 in England who we understand are -- their Fingerprint
20 Department are accredited to the 17025 standard and she
21 was asked to attend there to see how they approached the
22 17025 standard.

23 Q. Insofar as you have learned from your colleague but
24 would we understand rightly that she had seen there that
25 there are recordings made of the features that have been

1 observed by digital photos being taken of comparator
2 screens?

3 A. As far as I understand it, that's what she reported
4 back, yes.

5 Q. Is that a documentation proposal that you have
6 considered yourself since you took over on the SAG?

7 A. I would need to see more information about it. On the
8 face of it, taking photographs of the comparator and the
9 points dotted on the comparator, on the face of it, I'm
10 not sure is the most effective way to record your
11 reasoning.

12 I think perhaps something that's written down or
13 documented might be more effective but that's just a
14 personal viewpoint. In terms of the whole requirement
15 for note-taking and recording your reasoning we've
16 started to discuss that at the SAG. I think Mr Nelson
17 has organised some kind of workshop about note-taking
18 with at least NPIA -- perhaps he could clarify on
19 that -- and we're going to be looking at the
20 requirements for that in terms of the 17025
21 accreditation.

22 As I say, on the face of it my personal viewpoint
23 would be there might be a more effective way of
24 recording your reasoning but I don't know enough about
25 what she saw or what way it was documented or supported.

1 Q. You have referred to minutes and we should perhaps look
2 at PS0043 at page 4. In fact, we should look at page 1
3 so you can satisfy yourself of what you are looking at.
4 I am sorry, Mrs Tierney.

5 These are minutes from 26th June 2008. Can I go
6 back to page 4 then. What we have been discussing was
7 about case analysis write-up which comes under point 7
8 in these minutes and there seems to have been some
9 discussion about this method of photographing the
10 evidence.

11 It says:

12 "A detailed discussion took place around the reasons
13 for this and why it has to be done, especially when this
14 level of detail is no longer required for court."

15 Would it be fair to say this may be a reference to
16 marked-up enlargements not being needed for court at the
17 present time?

18 A. Well, I would just like to say, obviously, I was not
19 present --

20 Q. If you can't comment then please don't but --

21 A. I wasn't present at the meeting as I was on maternity
22 leave at that stage but when asked to comment on these
23 minutes I did speak to my colleague who said that they
24 were referring to the fact that taking a photograph of
25 points on a comparator was similar to the old style of

1 doing up court enlargements and as we had had direction
2 from Crown Office that those were no longer required
3 they didn't say that that was necessarily a useful thing
4 to then introduce but, as I say, I wasn't privy to the
5 conversation or if, indeed, that is actually what they
6 were referring to but that was my understanding.

7 Q. Let us assume that is what is being recorded there. It
8 may be there are some things that aren't formally
9 required for court but that might be useful
10 record-keeping for your own purposes in any event.

11 Would that be a proposition you would agree with?

12 A. Yes.

13 Q. You see that the members had asked if they could meet
14 with UKAS to discuss the practicalities and it was
15 explained that advisory meetings with UKAS were not
16 permitted. It is recorded -- if we can have the next
17 page as well -- that a preassessment meeting would take
18 place in late autumn or winter before the final
19 assessment and there would be a list of improvement
20 actions being given for work before the organisation
21 could become accredited.

22 That is a document from June 2008. Has there, as we
23 speak now, been any preassessment meeting with UKAS
24 about 17025?

25 A. No.

1 Q. Why is that?

2 A. Because in terms of the transition to 17025 we're not at
3 a place yet where we're ready for preassessment. I
4 think that Mr Nelson has organised when that will take
5 place. We are moving towards that and we're not far
6 away from it and will be engaging with the quality
7 managers about the procedures and processes but I can't
8 account for why that deadline slipped or wasn't met
9 because I wasn't actually at work at that time but I
10 know that we are scheduled for preassessment -- well, my
11 latest information from Mr Nelson is we are scheduled
12 for preassessment at some stage in the New Year, in the
13 first half of the new year.

14 MISS CARMICHAEL: I see the time, sir.

15 THE CHAIRMAN: We will stop now. Perhaps over lunch a copy
16 could be provided to the witness. Thank you.

17 We will sit again then at 1.50.

18 **(1.00 pm)**

19 **(Luncheon Adjournment)**

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